DEPARTMENT OF THE NAVY
U. S. NAVAL AMMUNITION DEPOT
CRANE, INDIANA 47522

IN REPLY REFER TO:
QEWE-DEM:gs
8900

From: Commanding Officer, U. S. Naval Ammunition Depot, Crane, Indiana
To: National Aeronautics and Space Administration, Goddard Space Flight Center, Electrochemical Power Sources Section (716.2), Space Power Technology Branch, Greenbelt, Maryland 20771

Subj: Monthly Progress Report on National Aeronautics and Space Administration Space Cell Test Program; submission of

Encl: (1) Monthly Progress Report as of 31 March 1966 (3 copies)

1. The progress report for National Aeronautics and Space Administration purchase order W11,252B on the space cell test program is submitted as enclosure (1).

R. R. PETTEBONE

C. M. AUSTIN
By direction

Copy to:
NASA (Mr. Ernst M. Cohn, MSW), Washington, D. C. 20546
NASA (Mr. Emil Rynowitz, 672), Greenbelt, Maryland 20771
NASA, Scientific and Technical Information Facility (NASA Rep [illegible]), Bethesda, Maryland 20014

MONTHLY PROGRESS REPORT THROUGH 31 MARCH 1966

LIFE CYCLE TESTS

1. Status of Cycling Program: The cycling program has included cells from the following manufacturers: General Electric Company (G.E.), Gould-National Batteries, Inc. (Gould), Sonotone Corporation (Sonotone), Yardney Electric Corporation (Yardney), Gulton Industries, Inc. (Gulton) and Delco-Remy (Delco).

TOTAL NUMBER OF PACKS IN PROGRAM: 167

	Total Number of Packs Cycled To Date	Cycling	Failed	Cells Failed* Since Last Report	Total To Date
NICKEL CADMIUM (10-cell packs)					
G.E. 3.0 a.h.	12	5	7	0	50
Gould 3.5 a.h.	12	4	8	0	60
Sonotone 5.0 a.h.	12	6	6	0	46
Gulton 6.0 a.h.	12	2	10	0	66
TOTAL	48	17	31	0	222
NICKEL CADMIUM (5-cell packs)					
Sonotone 3.0 a.h.	6	6	0	0	1
Sonotone 5.0 a.h. STABISTOR	8	6	2	0	12
G.E. 5.0 a.h. NIMBUS	6	6	0	0	0
G.E. 12 a.h.	13	6	7	0	23
G.E. 12 a.h. 3rd Electrode	4	2	2	0	2
Gulton 1.25 a.h.	4	4	0	0	0
Gulton 3.6 a.h. COULOMETER	1	1	0	0	0
Gulton 4.0 a.h.	6	6	0	1	4
Gulton 5.0 a.h. NIMBUS	6	6	0	0	2
Gulton 5.6 a.h.	6	5	1	2	2
Gulton 6.0 a.h.	1	0	1	0	3
Gulton 6.0 HSI	3	2	1	1	4
Gulton 6.0 a.h. 3rd Electrode	6	6	0	1	4
Gulton 12 a.h.	6	4	2	0	9
Gulton 20 a.h.	12	3	9	1	33
Gulton 50 a.h.	2	0	2	0	6
Gould 20 a.h.	12	4	8	1	27
TOTAL	102	67	35	7	132
SILVER CADMIUM (10-cell packs)					
Yardney 12 a.h.	5	3	2	0	16
TOTAL	5	3	2	0	16
SILVER CADMIUM (5-cell packs)					
Yardney 5.0 a.h.	6	3	3	0	6
TOTAL	6	3	3	0	6

* All failure analysis results are cumulative. Total pack failures are shown on pages 8 through 39; partial pack failures on pages 40 through 58.

Enclosure (1)

	Total Number of Packs Cycled To Date	Cycling	Failed	Cells Failed* Since Last Report	Total To Date
SILVER ZINC (10-cell packs)					
Yardney 12 a.h.	1	0	1	0	6
Delco 25 a.h.	1	1	0	0	0
TOTAL	2	1	1	0	6
SILVER ZINC (5-cell packs)					
Delco 25 a.h.	3	0	3	0	10
Delco 40 a.h.	1	0	1	0	2
TOTAL	4	0	4	0	12

* All failure analysis results are cumulative. Total pack failures are shown on pages 8 through 39; partial pack failures on pages 40 through 53.

2. Test Parameters:

a. General Cycling Program:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge:

(a) 1.55 ± 0.03 volts per cell at 0° C.

(b) 1.49 ± 0.03 volts per cell at 25° C.

(c) 1.45 ± 0.03 volts per cell at 40° C.

(3) Depth of Discharge:

(a) 90-minute and 3-hour orbits:

1. 15 percent and 25 percent at 0° C.

2. 25 percent and 40 percent at 25° C.

3. 15 percent and 25 percent at 40° C.

(b) 24-hour orbits:

1. 50 percent at 25° C and 40° C.

(4) Orbit Times:

(a) 90 minutes--30-minute discharge and 60-minute charge.

(b) 3 hours--30-minute discharge and 150-minute charge.

(c) 24 hours--1-hour discharge and 23-hour charge..

b. Nimbus Packs:

(1) Ambient Temperature:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge: 1.49 ± 0.03 volts per cell at each temperature.

(3) Depth of Discharge:

(a) 15 percent and 25 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90-minutes--30-minute discharge and 60-minute charge.

c. Silver-Cadmium Packs:

(1) Ambient Temperatures:

(a) 90-minute orbit:

(1) -20° C.

(2) 0° C.

(3) 25° C.

(b) 24-hour orbit:

(1) 0° C.

(2) 25° C.

(3) 40° C.

(2) Voltage limits per pack on charge:

(a) 90-minute orbit:

(1) 1.60 ± 0.03 volts per cell at -20° C.

(2) 1.58 ± 0.03 volts per cell at 0° C.

(3) 1.55 ± 0.03 volts per cell at 25° C.

(b) 24-hour orbits: 1.50 ± 0.03 volts per cell at 0° C., 25° C., and 40° C.

(3) Depth of Discharge:

(a) 90-minute orbit: 25 percent at all temperatures.

(b) 24-hour orbit:

(1) 20 percent and 50 percent at 0° C.

(2) 20 percent at 25° C.

(3) 20 percent and 50 percent at 40° C.

(4) Orbit Time:

(a) 90-minute--30-minute discharge and 60-minute charge.

(b) 24-hours--1-hour discharge and 23-hour charge.

d. Silver-Zinc Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: 1.97 ± 0.03 volts per cell at 25° C.

(3) Depth of Discharge:

(a) 3-hour orbit: 40 percent at 25° C.

(b) 24-hour orbit: 25 percent and 40 percent at 25° C.

(4) Orbit Times:

(a) 3 hours--30-minute discharge and 150-minute charge.

(b) 24 hours--1-hour discharge and 23-hour charge.

e. Third Electrode Packs (Gulton):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limits per pack on charge: None. Limit is controlled by the third electrode voltage:

(a) 150 millivolts at 0° C.

(b) 300 millivolts at 25° C.

(c) 300 millivolts at 40° C.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

f. Third Electrode Packs (General Electric):

(1) Ambient Temperatures:

(a) 0° C.

(b) 25° C.

(c) 40° C.

(2) Voltage limit per pack on charge: None. Limit is controlled by the third electrode voltage; 400 millivolts at all temperatures.

(3) Depth of Discharge:

(a) 25 percent and 40 percent at 0° C.

(b) 25 percent and 40 percent at 25° C.

(c) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

g. Stabistor Packs:

(1) Ambient Temperatures:

(a) -20° C.

(b) 0° C.

(c) 25° C.

(d) 40° C.

(2) Voltage limits per pack on charge: None. Stabistor controls cell voltage.

(3) Depth of discharge:

(a) 25 percent and 40 percent at -20° C.

(b) 25 percent and 40 percent at 0° C.

(c) 25 percent and 40 percent at 25° C.

(d) 15 percent and 25 percent at 40° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

h. Coulometer Packs:

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Coulometer controls cell voltage.

(3) Depth of Discharge:

(a) 30 percent for 5 cells (Sonotone 5 a.h.)--coulometer built by Goddard Space Flight Center.

(b) 40 percent for 10 cells (Gulton 5.6 a.h.)--coulometer built by General Electric.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

i. Sherfey Cycling Packs:*

(1) Ambient Temperature: 25° C.

(2) Voltage limit per pack on charge: None. Pack cycled in the partially discharged state.

(3) Depth of Discharge: 40 percent at 25° C.

(4) Orbit Time: 90 minutes--30-minute discharge and 60-minute charge.

* This type of cycling starts with the cells in a completely discharged condition. Each cycle consists of a charge of 60 percent of the cell's rated capacity followed by a discharge of 40 percent of the cell's rated capacity. Upon completion of each fifth cycle, the cells are discharged through a resistor for 90 minutes to return the cells to the completely discharged condition for the start of the next sequence of five cycles. In this manner, the cells operate below the 100 percent charged state much of the time thereby preventing overcharging and buildup of excessive gas pressure.

3. Data:

a. Under normal operation, complete data is scheduled to be recorded every 32 cycles on the 90-minute and 3-hour packs. On the 24-hour packs, complete data is taken every eight cycles.

b. The attached data sheets give end of discharge and end of charge voltage readings for each cell on each cycle recorded.

4. Capacity Tests:

a. Before cycling, each pack was given a capacity test at its respective cycling temperature. This check consisted of a c/10 charge for 16 hours followed by a c/2 discharge to 1.0 volt per cell average. After each 88 days of cycling, each pack was discharged immediately after the end of the regular cycle charge period, at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 16 hours and discharged at the c/2 rate to 1.0 volt per cell average. The pack was then recharged at the c/10 rate for 48 hours, voltage limited to the cycle limits. Data of capacity tests is tabulated on pages 53 through 61.

CELL TYPE: General Electric 3.0 Ampere-Hour

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS — Nickel-Cadmium
15	25%	1.5	25°	432	7	8065	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	414	8	8254	Low Volt Disch, Low Volt Chg, Blistering on Bottom Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	479	5	8714	Low Volt Disch, Normal Volt Chg, Deposit on Terminal, Migration of Active Material, Blistering on Edge of Pos Plate, Separator Deteriorated.
			25°	267	10	10123	Low Volt Disch, Normal Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	485	4	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	447	9	10382	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
16	40%	1.5	25°	427	7	3985	Low Volt Disch, Normal Volt Chg, Pos Tab Broken and Touching Case, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			25°	58	6	4473	Low Volt Disch, Normal Volt Chg, Short on One Edge of Plates, Neg Plate Material Penetrated Separator.
			25°	361	1	4741	Low Volt Disch, Normal Volt Chg, Shorted, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	522	5	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
16	40%	1.5	25°	456	10	4917	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			25°	719	4	5013	Low Volt Disch, Low Volt Chg, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Several Small Burned Areas on Separator.
39	15%	1.5	50°	541	2	779	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	540	6	2083	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	549	7	2523	Low Volt Disch, High Volt Chg, Pos Tab Burned.
			40°	527	1	7213	Low Volt Disch, Normal Volt Chg, Deposit Around Pos Terminal, Pos Tab Burned, Migration of Neg Plate Material, Separator Deteriorated.
			40°	534	5	8109	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.5 gm, Pos Tab Burned, Migration of Active Material, Separator Deteriorated.
			40°	550	8	8109	Low Volt Disch, Normal Volt Chg, Pinpoint Penetration, Separator Deteriorated.
40	25%	1.5	40°	464	3	2073	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	3131	8	2182	Low Volt Disch, Normal Volt Chg, Leaked, Loose Plate Material on Separator.
			40°	47	7	2182	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
40	25%	1.5	40°	49	5	2446	Low Volt Disch, High Volt Chg, Pos Weld to Terminal Stud Burned, Poor Weld.
			40°	45	10	2461	Low Volt Disch, High Volt Chg, Loose Plate Material on Separator, Short at Outside End of Pos Plate.
			40°	466	2	2509	Low Volt Disch, High Volt Chg, Leaked, Pos Tab Burned and Shorted to Neg Tab.
			40°	441	6	2509	Low Volt Disch, High Volt Chg, Leaked, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
43	15%	3.0	40°	416	4	1182	Low Volt Disch, Low Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned.
			40°	499	3	1515	Low Volt Disch, High Volt Chg, Shorted at Top of Core, Separator Too Short, Pos Tab Burned and Broken.
			40°	412	6	1911	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused by Overheating From Poor Tab Weld.
			40°	426	9	2298	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Top of Separator Burned, Separator Impregnated with Neg Plate Material, Separator Deteriorated.
			40°	436	7	2515	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Poor Roll, Uneven Wind at End of Roll, Shorts at Top of Roll, Separator Deteriorated.
			40°	435	10	2656	Showed Open at Start of Cycle, Pos Tab Corroded, Pos Tab Broken, Separator Impregnated with Neg Plate Material, Separator Deteriorated.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
44	25%	3.0	40°	222	6	1672	Showed Open Circuit at Start of Cycle, Pos Tab Broken, Burned Tape on Tab Caused By Overheating From Poor Tab Weld.
			40°	366	8	3848	Low Volt Disch, High Volt Chg, Pinpoint Penetration, Separator Deteriorated, Blistering on Bottom Edge of Pos Plate.
			40°	459	1	3854	Shorted on Cycling, Deposit on Pos Terminal, Pinpoint Penetration, Separator Deteriorated.
			40°	77	3	3854	Low Volt Disch, Normal Volt Chg, Migration of Active Material, Separator Deteriorated.
			40°	3120	2	4487	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.
			40°	296	10	4487	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deterioration.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	CELL TYPE: Gould 3.5 Ampere-Hour FAILURE ANALYSIS Nickel-Cadmium
3	25%	1.5	25°	73	5	2785	Low Volt Disch, High Volt Chg, Short Near Center of Core, Piece of Pos Plate Material Between Plates Causing Short Through Separator.
			25°	54	2	3090	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.7 gm, Weak Weld on Neg Tab to Plate.
			25°	165	9	4081	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.7 gm, Deposit on Glass Seal, Short Through Separator, Short at Pos Tab Near Center of Core, Neg Tab Weld to Plate Weak.
			25°	93	6	4289	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.6 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	97	7	4401	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.5 gm, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	77	4	4751	Low Volt Disch, Normal Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates.
			25°	188	10	4751	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.1 gm, Neg Plate Material on Separator.
4	40%	1.5	25°	81	7	1609	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, High Pres Bulge Top.
			25°	90	8	1827	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.7 gm, High Pres Bulge Top.
			25°	2	1	2110	Low Volt Disch, Low Volt Chg, Separator Deteriorated at Center of Core, Under Pressure When Opened.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
4	40%	1.5	25°	43	6	2954	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.3 gm, Plate Material on Separator.
			25°	27	3	3029	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated.
			25°	198	10	3164	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.6 gm, Separator Deteriorated, Pos Plate Material Between Plates.
7	25%	3.0	25°	49	2	3007	Low Volt Disch, Normal Volt Chg, Leaked Around Glass Seal, Lost 2.7 gm, Neg Plate Material Migrated Through Separator, Separator Deteriorated, One Weak Weld Pos Tab to Plate.
			25°	37	1	3130	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.1 gm, Glass Seal Broken, Separator Very Dry, Neg Plate Material Migration, Pinpoint Penetration, Loose Neg Plate Material on Separator, Separator Deteriorated, All Tab Welds to Plate Weak.
			25°	109	6	3483	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.0 gm, Deposit on Glass Seal, Separator Deteriorated, Pinpoint Penetration, Neg Plate Material on Separator, Weak Weld on One Tab to Pos Plate Weld.
			25°	104	5	3736	Shorted on Cycling, Deposit on Glass Seal, Leaked, Lost 1.1 gm, Weak Weld Pos Tab to Plate, Neg Plate Material on Separator, Pinpoint Penetration, Separator Deteriorated.
			25°	131	7	3884	Low Volt Disch, Normal Volt Chg, Deposit Around Glass Seal, Leaked, Lost 1.7 gm, Neg Plate Material Loose, Pinpoint Penetration, Separator Deteriorated.
			25°	62	3	4173	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.4 gm, One Weak Weld on Pos Tab to Plate, Pinpoint Penetration, Separator Deteriorated.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
8	40%	3.0	25°	68	6	1346	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Plate Material on Separator.
			25°	112	8	1704	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, Pos Tab Weld to Bottom of Can Weak, Pos Tab Weld to Plate Weak.
			25°	39	1	1985	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Neg Plate Material on Separator.
			25°	170	10	1985	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Pos and Neg Tab Weld Weak to Plates Near Center of Core, Separator Deteriorated at Center of Core.
			25°	78	7	2138	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Pos Tab Weld to Case Weak, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			25°	41	2	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.7 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, One Bad Weld Neg Tab to Plate.
			25°	130	9	2494	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Separator Deteriorated, Pos and Neg Plate Material Impregnated Separator.
27	15%	1.5	40°	13	3	2901	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Separator Deteriorated, Pos Plate Material on Separator.
			40°	195	8	2901	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.6 gm, Short Through Separator, Separator Burned at Center of Core, Pos Plate Material on Separator.
			40°	103	7	2998	Low Volt Disch, Normal Volt Chg, High Pres, Short Through Separator, Pieces of Pos Plate Material Between Plates.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
27	15%	1.5	40°	200	10	3270	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.5 gm, Short Through Separator, Separator Deteriorated at Center of Core, Pos Tab Weld to Case Weak.
			40°	197	9	4102	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 1.4 gm, Short at Pos Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator.
			40°	11	2	4485	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
28	25%	1.5	50°	122	2	408	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.8 gm, Weak Bottom Weld Suspicious Spot but not Definite.
			40°	157	7	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 2.0 gm, High Pres Bulge.
			40°	158	8	484	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.9 gm, High Pres Bulge Top.
			40°	141	5	860	Low Volt Disch, High Volt Chg, Leaked, Lost 3.5 gm.
			40°	168	10	1293	Low Volt Disch, High Volt Chg, Weak Weld to Bottom of Case.
			40°	121	1	1811	Low Volt Disch, Low Volt Chg, Short at Outside End of Plates, Grid Wire Penetrated Separator.
			40°	133	3	1811	Low Volt Disch, High Volt Chg, Weak Weld on Pos Tab to Case.
			40°	140	4	1811	Low Volt Disch, Low Volt Chg, Short Around Pos Tab, Blistering on Pos Plate, Active Neg Plate Material on Separator.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
28	25%	1.5	40°	155	6	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case.
			40°	163	9	1811	Low Volt Disch, Low Volt Chg, Short Through Separator, Weak Weld to Bottom of Case, Deposit on Glass Seal.
31	15%	3.0	40°	R166	9	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.1 gm, Separator Deteriorated.
			40°	R179	10	1500	Low Volt Disch, Low Volt Chg, Leaked, Lost 1.5 gm, Short Through Separator, Separator Deteriorated, One Weak Tab.
			40°	R92	2	1696	Low Volt Disch, High Volt Chg, Pieces of Plate Material Shorted Through Separator, Separator Deteriorated.
			40°	126	3	2411	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 2.1 gm, Short Through Separator by Piece of Pos Plate Material Between Plates, Separator Deteriorated, Neg Plate Material Impregnated Separator, Tab to Plate Weld Poor.
			40°	R162	8	2477	Low Volt Disch, High Volt Chg, Leaked Around Glass Seal, Lost 2.4 gm, Separator Deteriorated, Neg Plate Material Impregnated Separator, Pinpoint Penetration, Poor Weld Pos Tab to Case.
			40°	72	1	2517	Low Volt Disch, Low Volt Chg, Leaked Around Glass Seal, Lost 1.8 gm, Short Between Plates, Extra Piece of Pos Plate Between Plates, Separator Deteriorated, Pos Tabs to Plate Weld Both Weak.
			40°	143	6	2517	Low Volt Disch, Low Volt Chg, Short Through Separator at Start of Core, Extra Piece of Pos Plate Material, Separator Impregnated with Neg Plate Material, Separator Deteriorated, Neg Tab Weld to Pigtail Weak, One Tab to Pos Plate Weld Weak, Still Under Pressure When Opened.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
32	25%	3.0	40°	125	6	138	Low Volt Disch, Normal Volt Chg, Bottom Weld Weak, Greenish Corrosion Inside at Neg Lead.
			40°	65	3	495	Low Volt Disch, Normal Volt Chg, Leaked, Lost 1.5 gm, Bad Glass Seal Around Neg Terminal.
			40°	1	1	800	Low Volt Disch, Normal Volt Chg, Leaked, Lost 3.2 gm, Shorts Near Center of Core.
			40°	67	4	875	Low Volt Disch, Low Volt Chg, Leaked, Lost 2.2 gm, Short Around Tabs, Pos Tab Weld Weak to Case.
			40°	132	7	875	Failed During Shut Down to Move to Another Chamber, Leaked, Lost 4.4 gm, High Pres. Neg Tabs Pushed Out of Cell, Short at Center and Outside Edge of Core.
			40°	149	9	974	Low Volt Disch, High Volt Chg, Leaked, Lost 1.1 gm, Piece of Pos Plate Material Shorted Through Separator, Weak Welds to Case and Plates.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
2	40%	1.5	25°	811	10	3155	Shorted on Cycling, Leaked Around Seal, High Pressure Bulge on Bottom, Insulators Brittle, Exposed Grid Wires at Center of Core Penetrated Separator Causing Large Burned Area at Short, Pos and Neg Tab Weld Poor.
			25°	3628	5	3992	Low Volt Disch, Normal Volt Chg, Leaked Around Seal, High Pres Bulge on Bottom, Hole in Separator Exposing Pos and Neg Plates, Neg Plate Material Penetrated Separator.
			25°	3613	2	4411	Low Volt Disch, Low Volt Chg, Two Pieces of Neg Plate Material Wore Hole in Separator at Scoring Mark, Burned Through Plates, Neg Tab Welds Poor, Separator Beginning to Deteriorate.
			25°	3630	6	5262	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Pos and Neg Plate Material on Separator, Separator Deteriorated, Neg Tab to Plate Welds Weak, Burn Marks on Separator at Tabs, High Pressure Bulge.
			25°	3631	7	5262	Low Volt Disch, Low Volt Chg, Uncoined Plate Edges Pierced Separator Causing Partial Shorts, Burn Marks Around Tab Areas, Weak Weld on All Tab to Plate Welds, Deep Pressure Points Caused by Scoring, Separator Torn at Start of Core Exposing Pos and Neg Plate, Separator Deteriorated, Neg Plate Material on Separator.
			25°	3611	1	6671	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
25	15%	1.5	40°	4852	5	6348	Low Volt Disch, High Volt Chg, Separator Deteriorated, Large Burned Area at Center of Core, Pinpoint Penetration, Deep Scoring Caused Hole in Separator, Partial Shorts Around Edge of Plates, Deep Pressure Points Caused by Scoring.
			40°	4364	4	7052	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, High Pressure Bulge, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4317	1	7758	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	4350	3	9070	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Corner of Outside Neg Plates, Grid Wire Penetrated Separator and Shorted to Pos Plate, Separator Completely Deteriorated.
			40°	6850	6	9220	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole Through Separator Near Edge of Plate Causing Short, Small Piece of Neg Plate Material Between Plates and Separator.
			40°	4347	2	9328	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Neg Plate Material Migrated Through Separator, Separator Deteriorated, Weak Weld Tab to Neg Plate.
26	25%	1.5	40°	4323	1	2487	Grid Wire Penetrated Separator at Tabs.
			40°	6773	9	2902	Shorted on Cycling, Slight Burn Adjacent to Neg Tab, Separator Deteriorated, Neg Plate Material Penetrated Separator, Tab Welds Weak.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
26	25%	1.5	40°	7224	6	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Neg Tab Weld Weak, Neg Plate Material Penetrated Separator.
			40°	7232	7	2993	Low Volt Disch, Normal Volt Chg, High Pres Bulge, Deposit Around Seal, Pos Tab Weld Weak, Plate Broken at Pos Tab, Deep Pressure Points From Scoring, Separator Completely Deteriorated.
			40°	4881	3	3344	Shorted on Cycling, Complete Short From Deep Scoring, Plate Shorted Through Outer Wrap.
			40°	4240	4	3625	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Plate Material Penetrated Separator.
30	25%	3.0	40°	3657	7	855	Hole in Separator Allowing Pos Plate to Hit Case, Separator Damaged at Center of Cell Allowing Pos and Neg Plate to Short Together.
			40°	3643	4	3068	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Neg Tab to Plate Welds Weak, Burn Spots Around Tabs, Deep Scoring Caused Burn Spots on Separator.
			40°	809	9	3068	Low Volt Disch, Low Volt Chg, Deposit Around Glass Seal, Burn Spots Around Edge of Separator Caused By Uncoined Edge of Plates, Deep Scoring Caused Burn Spots on Separator, Burn Spots Around Tab Areas, Separator Deteriorated.
			40°	3658	8	3684	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Leaked, Lost 1.3 gm, Short Caused by Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			40°	3617	1	4141	Shorted During Cycling, Deposit on Glass Seal, Hole in Separator at Tab Weld Area Caused Short, Separator Completely Deteriorated.
			40°	7230	10	4141	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Migration of Neg Plate Material, Separator Completely Deteriorated.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
13	25%	1.5	25°	2305	1	308	Low Volt Disch, High Volt Chg, Lost 12 gm, CO_3 Top Ceramic, High Pres Bulge.
			25°	2355	10	502	Low Volt Disch, High Volt Chg, Lost 10 gm, High Pres Bulge.
			25°	3134	5	2969	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	3211	7	3084	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	2613	4	3598	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Separator Deteriorated.
			25°	2324	2	4021	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Deteriorated, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
14	40%	1.5	25°	1623	4	262	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres Bulge.
			25°	1635	5	262	Voltage Fell Off During Charge, Went Flat in 3 Min. on Disch, Lost 6 gm, Concave Wall, High Pres Bulge, Ceramic Broken Inside Case, CO_3 on Outside of Ceramic, Pos Terminal Loose.
			25°	2356	1	450	Low Volt Disch, High Volt Chg, Lost 12 gm, High Pres.
			25°	2387	2	1113	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	2391	3	1618	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	3208	7	2086	Low Volt Disch, Normal Volt Chg, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
17	25%	3.0	25°	1862	5	721	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1823	3	721	Low Volt Disch, High Volt Chg, High Pres Bulge, Burnt Spot on Neg Plate Near Bottom Second From End, Ceramic Short.
			25°	2348	10	1688	Low Volt Disch, Low Volt Chg, Ceramic Short.
			25°	1757	1	2375	Low Volt Disch, Low Volt Chg, Ceramic Short, Deposit Around Ceramic Seal, High Pres Bulge.
			25°	1598	2	2449	Low Volt Disch, Low Volt Chg, Pinpoint Penetration of Separator, Blistering on Pos Plate, High Pres Bulge.
			25°	2347	9	2885	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pressure Bulge, Still Under Pressure When Opened.
18	40%	3.0	25°	1826	6	365	Low Volt Disch, Chg Volt Normal, Lost 3 gm, Concave Wall, Ceramic Short.
			25°	1615	3	608	Low Volt Disch, Normal Volt Chg, Deposit on Top of Pos Terminal, Lost 5.1 gm, High Pres Bulge.
			25°	1827	7	643	Low Volt Disch, High Volt Chg, High Pres Bulge, Ceramic Short.
			25°	2228	9	643	Low Volt Disch, High Volt Chg, Ceramic Short.
			25°	1562	5	1145	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates.
			25°	1233	1	1550	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate, Neg Plate Material on Separator.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
37	15%	1.5	50°	1764	3	238	Low Volt Disch, Volt Did Not Increase on Following Chg, (1.00 V) Lost 4 gm, Ceramic Short.
			40°	1784	8	1566	Low Volt Disch, Low Volt Chg, Lost 10.5 gm, Ceramic Short.
			40°	1802	4	2819	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plate.
			40°	2333	10	2981	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	1769	7	4897	Low Volt Disch, Normal Volt Chg, Ceramic Short, Leaked, Lost 1 gm, Blistering on Pos Plate, Separator Deteriorated.
			40°	1814	6	6064	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Separator Deteriorated, Neg Plate Material on Separator, Blistering on Pos Plates, Ceramic Short.
38	25%	1.5	50°	1454	8	37	No Volt on Chg or Disch, Ceramic Short.
			50°	1815	6	114	Volt Fell Off During Disch, Chg Volt Slightly Low, Lost 3.5 gm, Ceramic Short.
			40°	1853	9	187	Rev on Disch, Chg Volt Normal, Lost 4 gm, Deposits Around Pos Terminal (Outside), Ceramic Short.
			40°	1627	3	225	Low Volt Disch, High Volt Chg on Cycle 219, Dead on 225, Lost 3.5 gm.
			40°	2405	5	1333	Low Volt Disch, Normal Volt Chg, Pos Bus Shorted to Case.
			40°	1626	2	1377	Low Volt Disch, Low Volt Chg, High Pres Bulge, Ceramic Short.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
119	40%	3.0	25°	73	5	222	Normal Volt Disch, Low Volt Chg, Short Near Bottom of 5th or 6th Pos, No Obvious Cause.
			25°	80	2	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
			25°	86	3	1793	Low Volt Disch, Normal Volt Chg, Neg Plate Material Penetrated Separator, High Pressure, Blistering on Pos Plate.
122	25%	3.0	40°	16	2	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	58	3	801	Low Volt Disch, Low Volt Chg, Blistering on Pos Plates, Separator Deteriorated, Plate Material on Both Sides of Separator, High Pressure.
			40°	18	5	983	Low Volt Disch, Low Volt Chg, Plate Material Penetrated Separator, Pos Plates Blistered, High Pressure.
126	25%	1.5	40°	9	3	1273	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Neg Plate, Grid Wire Penetrated Separator, Several Other Plates Had Grid Wires Sticking Out, High Pressure.
			40°	R29	4	1509	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plate, Grid Wire Penetrated Separator, Blistering on Pos Plates, Separator Deteriorated, High Pressure.
			40°	11	5	1569	Low Volt Disch, Low Volt Chg, Shorted on Side of Pos Plate, Grid Wire Penetrated Separator, High Pressure.

CELL TYPE: Gulton 50 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
95	25%	1.5	0°	109	3	2643	Shorted Out While Cycling, All Plates Shorted at Bottom Center, Separator Very Dry and Stiff From Heat, Blistering on Pos Plate.
			0°	107	5	2938	Shorted Out While Cycling, Short Between Plates at Center Near Bottom of Plates, Separator Dry, Small Amount of Neg Plate Material Migration on Separator.
			0°	115	1	3227	Low Volt Disch, High Volt Chg, Separator Impregnated with Neg Plate Material, Large Blisters on Pos Plate, One Neg Plate Stuck to Can.
123	15%	1.5	40°	119	2	1873	Low Volt Disch, Low Volt Chg, Separator Decomposed, Hot Spots Through Separator Shorted Out Several Plates, High Pres Bulge, Still Under Pressure When Opened.
			40°	118	3	1873	Went Dead During Shutdown, Separator Decomposed, Several Small Hot Spots on Each Plate, Outside Neg Plates Stuck to Case, High Pres Bulge, Deposit Around Ceramic Seal of Pos Terminal.
			40°	117	4	1873	Went Dead During Shutdown, Separator Decomposed, Neg Plate Stuck to Case, High Pres Bulge, Still Under Pressure When Opened.

CELL TYPE: Delco 25 Ampere-Hour Silver-Zinc

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
75	40%	24.0	25°			32	Cell Blew Up, Pack Returned to Manufacturer.
89	40%	24.0	25°			80	Returned to Manufacturer for Analysis.
288	40%	3.0	25°			120	Returned to Manufacturer for Analysis.

CELL TYPE: Delco 40 Ampere-Hour Silver-Zinc

FAILURE ANALYSIS

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
275	25%	24.0	25°			139	Returned to Manufacturer for Analysis.

CELL TYPE: Yardney 12 Ampere-Hour

FAILURE ANALYSIS Silver-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
33	50%	24.0	40°		3	58	Leaked, Dried Out.
			40°		2	126	Leaked, Dried Out.
			40°		1	152	Leaked, Dried Out.
			40°		8	197	Leaked, Dried Out.
			40°		4	210	Leaked, Dried Out.
			40°		10	210	Leaked, Dried Out.
57	50%	24.0	0°		1	162	Leaked, Electrolyte Shorted Out Cell.
			0°		2	162	Leaked, Electrolyte Shorted Out Cell.
			0°		10	162	Leaked, Electrolyte Shorted Out Cell.
			0°		3	166	Leaked, Electrolyte Shorted Out Cell.
			0°		4	166	Leaked, Electrolyte Shorted Out Cell.
			0°		5	166	Leaked, Electrolyte Shorted Out Cell.
			0°		6	166	Leaked, Electrolyte Shorted Out Cell.
			0°		7	166	Leaked, Electrolyte Shorted Out Cell.
			0°		8	166	Leaked, Electrolyte Shorted Out Cell.
			0°		9	166	Leaked, Electrolyte Shorted Out Cell.

CELL TYPE: General Electric 3.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
20	40%	3.0	25°	421	5	3704	Low Volt Disch, Low Volt Chg, Blistering on Bottom and Top Edge of Pos Plate, Migration of Neg Plate Material, Separator Completely Deteriorated.
			25°	433	2	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated, Burned Pos Tab.
			25°	711	6	4485	Low Volt Disch, Low Volt Chg, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated, Deposit on Pos Terminal.
			25°	710	3	4889	Shorted on Cycling, Deposit on Pos Terminal, Migration of Neg Plate Material Through Separator, Hot Spots Around Pinpoint Penetrations, Blistering on Pos Plates, Separator Deteriorated.

CELL TYPE: Gould 3.5 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
52	25%	1.5	0°	116	8	7858	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Neg Plate Material on Separator, Excess Migration of Neg Plate Material, Separator Deteriorated.
			0°	194	10	8367	Low Volt Disch, Normal Volt Chg, Under High Pressure When Opened, Pinpoint Penetration, Migration of Active Material Around Tab Areas.
			0°	108	7	9724	Low Volt Disch, High Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.
			0°	118	9	9724	Low Volt Disch, Low Volt Chg, Loose Active Pos Plate Material, Migration of Neg Plate Material Through Separator, Separator Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
1	25%	1.5	25°	4361	4	2995	Low Volt Disch, High Volt Chg, Inclusion on Surface of Outside Pos Plate Wore Hole Through Separator and Thin Outside Wrap, Separator Sticking to Neg Plate, Glass Seal Leaked.
			25°	4335	1	4423	Low Volt Disch, High Volt Chg, Neg Tabs Weak Weld to Plates, Separator Melted at Center of Core, Extreme Pressure Points on Separator From Scoring Causing High Resistance Shorts.
			25°	4878	6	7782	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Short Caused by Excess Scoring, Migration of Neg Plate Material, Separator Completely Deteriorated.
5	25%	3.0	25°	4351	2	3771	Low Volt Disch, High Volt Chg, Deposit on Glass Seal, Excess Scoring, Migration of Neg Plate Material, Deep Pressure Points Resulting in Intermittant Shorts, Separator Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
6	40%	3.0	25°	4324	8	1069	Low Volt Disch, Normal Volt Chg, Separator Impregnated With Active Material, Separator Sticking to Neg Plate.
			25°	6904	10	1136	Low Volt Disch, Low Volt Chg, Small Hole in Separator at Start of Coil, Pos Plate Edge Broken Allowing Grid Wire to Penetrate Separator.
			25°	3637	4	1161	Grid Wires of Pos Plate Penetrated Separator and Shorted to Neg Plate, Active Plate Material Penetrated Separator at Three Points, Bad Tab Welds.
			25°	6875	9	3798	Low Volt Disch, Normal Volt Chg, High Pressure Bulge, Excess Scoring, Migration of Pos and Neg Plate Material, Separator Completely Deteriorated.
			25°	6882	7	4608	Low Volt Disch, Normal Volt Chg, Excess Scoring, Shorts at Edge of Plates, Neg Tab Area, and at Scoring, Weak Weld Neg Plate to Tab, Separator Deteriorated.
29	15%	3.0	40°	3626	1	1418	Shorted on Cycling, Neg Tab Welds Poor, Active Plate Material Penetrated Separator at Scoring Marks.
			40°	810	7	4835	Low Volt Disch, Low Volt Chg, Deposit on Glass Seal, Burn Spots Along Top Edge of Neg Plate, Hole Burned in Separator, Weak Weld Neg Tab to Plate.
			40°	4327	8	4340	Low Volt Disch, Normal Volt Chg, Deposit on Glass Seal, Hole in Separator Adjacent to Score Band, Separator Completely Deteriorated.

CELL TYPE: Sonotone 5.0 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
49	15%	1.5	0°	6887	9	2010	Low Volt Disch, Low Volt Chg, Burn on Separator Opposite Pos Tab.
			0°	4370	3	10073	Shorted During Cycling, Short Through Separator Caused By Deep Pressure Points Adjacent to Scoring, Migration of Neg Plate Material, Small Inclusion on Plates Starting to Penetrate Through Separator.

CELL TYPE: Gulton 5.0 Ampere-Hour (NIMBUS)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
128	25	1.5	40	291	3	2422	Shorted During Cycling, Neg Plate Not Welded To Case, Loose Neg Plate Material at Center of Core, Migration of Neg Plate Material, Separator Deteriorated, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
62	25%	1.5	0°	1630	10	2995	Low Volt Disch, High Volt Chg, Leaked, Lost 6.8 gm, Ceramic Seal Broke, Deposit on Inside of Ceramic, High Pres Bulge, Blistering on Pos Plates.
			0°	1792	4	4066	Low Volt Disch, Low Volt Chg, Small Shorts Through Separator Near Pos Tab, Blistering on Pos Plate, Separator Deteriorated.
			0°	1806	5	4441	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	2227	7	8590	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Blistering on Pos Plates, Ceramic Short.
65	15%	3.0	0°	1284	4	5012	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Concave Sides, Edge of Pos Tab Shorted to Top of Neg Plates, Very Light Migration of Neg Plate Material, Blistering on Pos Plates.

CELL TYPE: Gulton 6.0 Ampere-Hour (HSI)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
238	25%	1.5	40°	5321	5	4350	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Pos Tab Burned, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Completely Deteriorated, Neg Plate Shorted Through Separator.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
82	25%	1.5	25°	430	2	7527	Low Volt Disch, Normal Volt Chg, Pierced Separator Caused By Rough Place at Top Edge of Neg Plate, Neg Plate Material Migrated, Separator Deteriorated.
124	25%	1.5	0°	410	5	3037	Cell Lost Capacity on Cycling But Came Back When Removed From Pack, So It was Put Back on Cycling in Same Pack.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
102	15%	3.0	0°	449	2	135	Volt Fell Suddenly at End of Chg, Burn Spots at Busses, Concave Around Spots, End Neg Pushed Into Pos Tab.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
98	25%	1.5	0°	77	5	3556	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Neg Plate Material Penetrated Separator, Two Pos Plates Not Welded to Tabs.
			0°	47	1	8619	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Pieces of Loose Neg Plate Material Between Plates, Migration of Neg Plate Material, Separator Deteriorated, Short Through Separator at Bottom of Plates Where Tape Holds Plates Together.
105	25%	3.0	25°	40	1	4306	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Deep Penetration by Blisters on Pos Plate, Separator Deteriorated.
108	15%	3.0	40°	81	2	4003	Shorted on Cycling, Still Under Pressure When Opened, Several Shorts Caused by Small Pieces of Metal Between Plates, Blistering on Pos Plates, Separator Deteriorated.
			40°	82	3	4233	Shorted During Cycling, Still Under Pressure When Opened, Loose Pieces of Pos Plate Material Between Plates, Pinpoint Penetration, Blistering on Pos and Neg Plates, Separator Deteriorated, Short Between Pos Plate and Neg Tab at Top of Cell.

CELL TYPE: Sonotone 3.0 Ampere-Hour Nickel-Cadmium

FAILURE ANALYSIS

Low Volt Disch, Normal Volt Chg, Cell Very Dry, Capacity Decay Due to Insufficient Electrolyte, Migration of Plate Material Around Tab and Scoring Areas.

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED
202	40%	1.5	25°	A3553	3	1630

CELL TYPE: Gulton 6.0 Ampere-Hour (Third Electrode)

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
11	25%	1.5	25°	147	3	2753	Third Electrode Shorted to Pos, Ceramic Short, Blistering on Pos Plates, Separator Deteriorated, Leaked, Lost 1.3 gm.
59	25%	1.5	0°	140	3	3202	Third Electrode Shorted to Neg Plate, Migration of Neg Plate Material, Shorted out Third Electrode, High Pressure Bulge, Still Under Pressure When Opened, Lost 1.4 gm.
71	40%	1.5	0°	130	5	2993	Low Volt Disch, High Volt Chg, Deposit on Neg Terminal, Leaked, Lost 8.7 gm, High Pressure Bulge, Large Deposits of Loose Active Neg Plate Material, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates.

CELL TYPE: Gulton 3.6 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
Sherfey	40%	1.5	25	106	2	2409	Low Volt Disch, Low Volt Chg, Deposit on Edge of Top to Side Weld, Leaked, Lost 3.9 gm., Loose Active Material Pos and Neg, Pinpoint Penetration, Separator Very Dry.

* Failed During This Reporting Period

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
41	15%	3.0	40°	1771	9	649	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	1801	6	1062	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	3135	2	1132	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1852	7	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
			40°	2221	8	1157	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	1632	3	1689	Low Volt Disch, Normal Volt Chg, Ceramic Short, Blistering on Pos Plates.
42	25%	3.0	50°	2309	8	96	Low Volt Disch, Normal Volt Chg, Ceramic Short.
			40°	2346	7	382	Low Volt Disch, Low Volt Chg, CO_3 on Bottom of Case, Ceramic Short.
			40°	2306	9	416	Low Volt Disch, High Volt Chg, Ceramic Short.
			40°	918	1	484	Low Volt Disch, Low Volt Chg, High Pres Bulge, Deposit on Bottom of Case, Ceramic Short, Lost 3.1 gm.
			40°	2340	6	3619	Low Volt Disch, Normal Volt Chg, Deposit Around Ceramic Seal and Bottom Seam of Can, Leaked, Lost 8.2 gm, Pinpoint Penetration, Separator Deteriorated.
			40°	2334	4	4133	Low Volt Disch, Low Volt Chg, Deposit Around Cracked Pos Terminal, Leaked, Lost 8.8 gm, Migration of Neg Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
61	15%	1.5	0°	1622	2	1	Volt Between 0.25 and 0.3 V Throughout Cycle, Side Concave, Burnt Case, End Neg Pushed Into Pos Tab. Cell Replaced in Pack Due to Early Failure.
			0°	1845	8	6	Lost 5 gm, Leak at Weld on Bottom, High Pres Bulge, Cell Replaced in Pack Due to Early Failure.
			0°	2397	5	2762	Low Volt Disch, Low Volt Chg, Ceramic Short.
			0°	1825	4	4094	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2311	10	4285	Low Volt Disch, Low Volt Chg, Ceramic Short, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge.
			0°	2400	6	4413	Low Volt Disch, Low Volt Chg, Ceramic Short, Blistering on Pos Plates, High Pres Bulge.
			0°	1636	3	*9760	Low Volt Disch, Low Volt Chg, High Pres Bulge, Concave Sides, Leaked, Lost 2.7 gm, Rough Place on Pos Plate Shorted Through Separator, Migration of Neg Plate Material Through Separator, Blistering on Pos Plates, Separator Deteriorated, Ceramic Short.
			0°	1616	1	*10146	Low Volt Disch, High Volt Chg, Deposit on Pos Terminal, Concave Sides Causing Bus to Short Against Case, Pos Tab Burned, Migration of Neg Plate Material Through Separator, Separator Very Slightly Deteriorated, Leaked, Lost 6.0 gm.

* FAILED DURING THIS REPORTING PERIOD.

CELL TYPE: Gulton 6.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
66	25%	3.0	0°	1794	6	1045	Low Volt Disch, High Volt Chg, High Pres Bulge, Concave Side, Ceramic Broken, No Seal, Lost 5.1 gm, Pos Bus Against Case.
			0°	1843	8	1173	Low Volt Disch, Low Volt Chg, Wall Concave, Ceramic Short.
			0°	1781	5	1237	Low Volt Disch, High Volt Chg, High Pres Bulge, Deposit Around Pos Terminal, Ceramic Broken on Pos Terminal, Blisters on Pos Plate, Burnt Spot on Separator at Blisters, Lost 1.3 gm.
			0°	1634	3	1417	Low Volt Disch, Normal Volt Chg, Ceramic Short, High Pres Bulge, One Side Concave Other Convex, Pos Plates Blistered, Lost 2.3 gm.
			0°	1823	7	2122	Low Volt Disch, Low Volt Chg, Leaked, Lost 7.8 gm, Separator Impregnated with Neg Plate Material, Blistering on Pos Plates, High Pres Bulge, One Side Concave.
				1591	4	4414	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, High Pressure Bulge, Concave Sides Shorting Against Pos Bus, Ceramic Short, Migration of Neg Plate Material, Pinpoint Penetration of Separator.
79	50%	24.0	25°	2982	1	149	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Still Under Pressure When Opened, Ceramic Short, Very Light Migration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2984	3	164	Low Volt Disch, Low Volt Chg, Still Under Pressure When Opened, Ceramic Short, Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2983	2	545	Low Volt Disch, Normal Volt Chg, Burned Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deteriorated.
			25°	2985	4	545	Low Volt Disch, Normal Volt Chg, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Deterioration.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
85	15%	1.5	40°	428	4	8888	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	448	3	8947	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	455	2	9710	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
93	50%	24.0	40°	208	2	266	Low Volt Disch, Normal Volt Chg, Was Opened Up But Did Not Show Anything to be Wrong with Cell, Failure Due to Loss of Capacity..
			40°	204	1	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	209	3	349	Low Volt Disch, Normal Volt Chg, Deposit on Pos and Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated.
			40°	210	4	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Pin-point Penetration, Separator Deteriorated.
			40°	211	5	349	Low Volt Disch, Normal Volt Chg, Deposit on Neg Terminal, Migration of Neg Plate Material, Separator Deteriorated, Plate Not Packed Evenly.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
96	40%	1.5	25°	445	3	3822	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	446	2	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
			25°	442	4	4020	Low Volt Disch, Low Volt Chg, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator.
97	40%	3.0	25°	438	2	3894	Low Volt Disch, Low Volt Chg, Deposit on Pos and Neg Terminals, Pinpoint Penetration, Separator Deteriorated.
			25°	435	3	3946	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Blistering on Pos Plate, Separator Deteriorated.
			25°	434	4	5002	Low Volt Disch, Normal Volt Chg, Still Under Pressure When Opened, Migration of Neg Plate Material, Separator Completely Deteriorated.
99	25%	1.5	40°	429	3	3841	Shorted on Cycling, Separator Penetrated by Neg Plate Material, Pinpoint Shorts Through Separator, Leaked at Neg Terminal, Epoxy Lifted Up.
			40°	432	2	3841	Failed During Shut Down of Pack, Separator Deteriorated, Separator Impregnated with Neg Plate Material.
			40°	440	1	4853	Low Volt Disch, Low Volt Chg, Separator Deteriorated, Separator Impregnated with Neg Plate Material.

CELL TYPE: General Electric 12.0 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
100	25%	3.0	40°	427	3	4170	Shorted on Cycling, High Pressure Bulge, Still Under Pressure When Opened, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	431	2	4358	Shorted on Cycling, High Pressure Bulge, Still Under Pressure, Migration of Neg Plate Material, Separator Completely Deteriorated.
			40°	436	1	4424	Shorted on Cycling, Migration of Neg Plate Material Through Separator, Separator Completely Deteriorated.

CELL TYPE: Gulton 12 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	FAILURE ANALYSIS
290	25%	1.5	40°	1460	4	3060	Low Volt Disch, Low Volt Chg, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1459	3	3318	Shorted on Cycling, Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated Allowing Plates to Short Together.
			40°	1461	5	5124	Low Volt Disch, Low Volt Chg, High Pressure Bulge, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
296	40%	1.5	25°	1447	4	5036	Low Volt Disch, Normal Volt Chg, Piece of Loose Neg Plate Material Between Plates, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			25°	1443	2	5152	Shorted on Cycling, High Pressure Bulge, Blistering on Pos Plates, Separator Completely Gone, Hottest Point Near Center of Pack, All Insulators Burned, Leaked, Lost 3.3 gm.
			25°	1445	3	5152	Low Volt Disch, Low Volt Chg, Deposit on Both Terminals, High Pressure Bulge, Migration of Neg Plate Material, Short Through Separator Near Center of Plate, Separator Completely Deteriorated.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
73	25%	1.5	25°	396	3	1776	Low Volt Disch, Normal Volt Chg, Concave Side, Neg Ceramic Seal Broken, Lost 23.7 gm.
			25°	387	1	6120	Low Volt Disch, Low Volt Chg, Lost 13.2 gm, Separator Completely Deteriorated, Neg Plate Material Migration, Pinpoint Penetration, Blistering on Pos Plates, High Pressure Bulge.
			25°	465	4	7763	Low Volt Disch, Low Volt Chg, Deposit on Pos Terminal, Sides Concave, Migration of Active Plate Material, Blistering on Pos Plates, Separator Completely Deteriorated, Ceramic Short.
74	25%	3.0	25°	458	4	1184	Low Volt Disch, Low Volt Chg, Leaked, Lost 14.2 gm, Blistering on Pos Plates.
			25°	419	3	1302	Low Volt Disch, Normal Volt Chg, Leaked, Lost 21.9 gm.
			25°	440	2	1754	Low Volt Disch, Normal Volt Chg, Leaked Around Both Terminals, Ceramic Broken on Neg Terminal, Lost 18.0 gm, Neg Plate Material Penetrated Separator, Sides Concaved, Shorting Case to Bus.
76	15%	1.5	40°	453	2	7697	Shorted on Cycling, Deposit on Neg Terminal, Ceramic Broken Around Neg Terminal, Extraneous Active Material Caused Short Between Plates, Separator Completely Deteriorated.
			40°	431	4	7698	Cell Shorted During Shut Down for Cell Removal, High Pressure Bulge, Still Under Pressure When Opened, Pinpoint Penetration, Causing Shorts, Separator Completely Deteriorated.
			40°	455	3	9348	Shorted During Cycling, High Pressure Bulge, Still Under Pressure When Opened, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated, Short on Upper Corner Near Neg Tab.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
87	40%	1.5	25°	468	1	163	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 8 gm.
			25°	388	2	208	Low Volt Disch, High Volt Chg, Lost 26.7 gm, Ceramic Short Around Pos Terminal.
			25°	394	3	627	Low Volt Disch, High Volt Chg, Lost 16.4 gm, High Pres Bulge, Deposit on Both Terminals, Ceramic Short Neg to Case.
			25°	454	4	627	Low Volt Disch, Low Volt Chg, Lost 21.6 gm, Deposit on Both Terminals, Sides Concave, Hit Bus on Both Sides.
			25°	386	5	627	Low Volt Disch, Low Volt Chg, Lost 18.1 gm, High Pres Bulge, Burnt Separator 5th or 6th Neg Plate Near Top, Ceramic Short.
88	40%	3.0	25°	422	2	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	404	1	151	Low Volt Disch, High Volt Chg, High Pres Bulge, Bottom Ceramic Leak, Lost 25 gm.
			25°	466	3	358	Low Volt Disch, High Volt Chg, High Pres Bulge, Lost 16.4 gm.
			25°	429	5	358	Low Volt Disch, Low Volt Chg, Ceramic Short Around Pos Terminal.
90	25%	1.5	40°	452	4	2824	Low Volt Disch, Low Volt Chg, Short Through Separator at Top of Plates, High Pres Bulge on Sides, High Pres, Separator Deteriorated.
			40°	457	5	2824	Low Volt Disch, Normal Volt Chg, Short Through Separator, Blistering on Pos Plate, High Pres Bulge on Sides, High Pres.
			40°	378	3	4045	Normal Volt Disch, Went Dead on Chg During Cap Check, Ceramic Short, Separator Completely Deteriorated.

CELL TYPE: Gulton 20 Ampere-Hour

FAILURE ANALYSIS Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
91	25%	3.0	40°	395	4	2862	Shorted Out Following Capacity Check, Leaked, Lost 6.8 gm, Deposit on Both Terminals, Both Ceramic Seals Broken, Separator Completely Deteriorated, Neg Plate Material Migration, Separator Very Wet, Plastic Wrap Burned, Ceramic Short.
			40°	412	3	3385	Shorted on Cycling, High Pressure Bulge, Pos and Neg Plate Material on Separator, Separator Completely Deteriorated.
			40°	489	1	4480	Shorted During Cycling, Deposit on Both Terminals, Still Under Pressure When Opened, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
			40°	447	2	4480	Shorted During Cycling, Deposit on Neg Terminal, High Pressure Bulge, Concave Sides, Hot Spots Around Pinpoint Penetration, Blistering on Pos Plates, Separator Completely Deteriorated.
101	15%	1.5	0°	435	2	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 24.6 gm, High Pres Bulge, Separator Very Dry.
			0°	407	5	3111	Low Volt Disch, High Volt Chg, Leaked, Lost 20.4 gm, Separator Very Dry.
			0°	438	4	3629	Low Volt Disch, High Volt Chg, Leaked, Lost 13.2 gm, High Pres Bulge, Sides Concave, Blistering on Pos Plates.
115	25%	1.5	0°	490	3	2107	Low Volt Disch, Normal Volt Chg, Walls Concave, Busses Shorted to Case, Lost 26.9 gm.
			0°	508	2	2203	High Pres Bulge, Blisters on Pos Plate, Busses Shorted to Case.
			0°	467	4	2291	Black Deposit on Outside on Neg Terminal, High Pres Bulge, Busses Shorted to Case, Blisters on Pos Plate, Burnt Spot on Separator.

CELL TYPE: Gould 20 Ampere-Hour

FAILURE ANALYSIS: Nickel-Cadmium

PACK NUMBER	DEPTH OF DISCHARGE	ORBIT PERIOD (HOURS)	TEST TEMPERATURE	CELL NUMBER	POSITION IN PACK	CYCLES COMPLETED	
104	25%	1.5	25°	69	1	2672	Low Volt Disch, Low Volt Chg, Shorted at Bottom on Pos Plate, Pos Grid Wire Penetrated Separator, Short at Top Between Pos Grid and Neg Tab, High Pressure.
			25°	R36	5	2826	Low Volt Disch, Low Volt Chg, Short Between Plates, Grid Wire Penetrated Separator, Pos Plate Material Between Plates, High Pressure.
			25°	5	3	2980	Low Volt Disch, Low Volt Chg, Separator Completely Deteriorated, Short Between Plates, High Pressure.
112	15%	1.5	40°	17	1	5005	Low Volt Disch, Low Volt Chg, Short Between Plates, Short About One Inch From Bottom of Plates, Separator Completely Deteriorated, High Pressure.
			40°	25	2	5005	Low Volt Disch, Low Volt Chg, Shorted Through Separator, Shorted on Bottom Corner of Plates, Separator Completely Deteriorated, High Pressure.
			40°	38	5	5213	Low Volt Disch, Low Volt Chg, Short at Top Corner of Plate Where Pos Tabs are Connected to Plates, Separator Deteriorated Allowing Plates to Come Together, Blistering on Pos Plates.
118	40%	1.5	25°	61	2	1747	Low Volt Disch, Low Volt Chg, Short at Bottom of Pos Plate, Grid Wires Penetrated Separator Where Tape Holds Plates Together, High Pressure.
			25°	R91	4	1963	Low Volt Disch, Low Volt Chg, Shorted at Bottom Corner of Pos Plates, Grid Wires Through Separator, Rough Grid Showing Through at Top and Bottom of Most Plates, High Pressure.
			25°	92	5	2937	Low Volt Disch, Low Volt Chg, Short Through Separator on Side of Plates, Pos Plate Material Penetrated Separator, High Pressure.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
G.E. 3 A.H.	63	1.5	15	0	3.48		3.18	3.12	3.05	3.03	3.05	2.90	3.30	3.50	
	64		25	0	3.50		3.33	3.70	3.38	3.35	3.42	3.27	3.12		
	15		25	25	4.00		3.38	2.93	2.33	1.95	1.47	1.15	1.10		
	16		40	25	4.08		2.75	2.10	1.35	----	----	----	----	----	5013
	39		15	50/40	1.65	2.43 (779)	2.10	1.53	1.25	1.17	0.70	----	----	----	8109
	40		25	50/40	1.80	2.50 (1440)	0.88**	0.88	----	----	----	----	----	----	2509
G.E. 3 A.H.	67	3	15	0	3.63		3.25	3.40	3.53	2.97	3.25	2.95			
	68		25	0	3.50		3.35	3.53	3.40	3.27	3.25	2.93	2.87		
	19		25	25	3.93		3.78	3.48	3.15	3.00	2.78	2.48	2.29	2.20	
	20		40	25	3.78		3.00	2.35	2.07	1.83	2.00	1.62	1.47	1.20	
	43		15	50/40	1.77	2.63 (320)	2.20	1.61	1.65	----	----	----	----	----	2656
	44		25	50/40	1.60	2.00 (327)	1.35	1.19	1.15	1.10	0.95	0.88			
Gould 3.5 A.H.	51	1.5	15	0	3.62		4.00	3.33	3.41	3.21	3.35	3.15	3.47	3.00	
	52		25	0	3.33		3.85	3.53	3.18	3.30	3.24	2.80	2.65		
	3		25	25	4.00		3.82	2.92	2.25	----	----	----	----	----	4751
	4		40	25	3.94		3.38	2.77	----	----	----	----	----	----	3164
	27		15	50/40	1.53	2.63 (779)	2.07	1.95	1.90	----	----	----	----	----	4485
	28		25	50/40	1.55	2.07 (424)	2.86	----	----	----	----	----	----	----	1811
Gould 3.5 A.H.	55	3	15	0	3.27		3.59	3.15	3.38	3.33	3.27	3.03	2.77		
	56		25	0	3.50		3.91	3.53	3.65	3.41	3.38	3.30	3.27		
	7		25	25	4.32		4.03	3.79	3.53	2.77	2.28	2.51			
	8		40	25	4.29		3.65	3.35	3.03	----	----	----	----	----	2494
	31		15	50/40	1.60	1.31 (328)	1.75	1.98	2.16	----	----	----	----	----	2524
	32		25	50/40	1.55	1.66 (495)	1.49	----	----	----	----	----	----	----	975

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
** Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING		CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)	FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Sonotone 5 A.H.	49	1.5	15	0	5.45		5.54	5.50	4.96	4.79	4.71	4.50	4.54		
	50		25	0	5.04		4.96	4.58	4.25	3.79	3.67	3.67	3.46		
	1		25	25	5.42		3.67	2.33	2.88	2.79	2.21	2.58	2.80	2.46	
	2		40	25	6.42		4.38	4.17	3.25	3.00	----	----	----	----	6671
	25		15	50/40	3.08	3.63 (703)	2.25	1.83	2.04	1.17	1.17	1.54	0.83		
	26		25	50/40	3.17	3.17 (445)	2.75	2.93	----	----	----	----	----	----	3625
Sonotone 5 A.H.	53	3	15	0	5.67		5.79	5.67	5.42	5.33	5.50	5.54	5.00		
	54		25	0	4.92		3.96	3.96	4.13	3.96	3.75	3.29	3.38		
	5		25	25	5.71		4.58	3.04	2.04	2.13	2.13	2.08	2.21		
	6		40	25	5.83		4.50	3.29	3.25	2.92	2.33	2.33	2.00	2.13	
	29		15	50/40	3.33	4.92 (223)	2.75	2.38	2.42	2.08	1.96	1.29	1.79		
	30		25	50/40	3.75	3.50 (183)	1.88	2.88	2.38	1.67	1.21	----	----	----	4141
Gulton 6 A.H.	61	1.5	15	0	5.00		5.10	5.40	4.45	3.15	2.60	2.15	1.75		
	62		25	0	5.00		4.75	3.80	4.35	3.55	3.30	3.30	3.95		
	13		25	25	5.80		2.75	2.85	2.70	----	----	----	----	----	4021
	14		40	25	6.40		3.45	----	----	----	----	----	----	----	2086
	37		15	50/40	2.75	3.60 (239)	1.70	2.95	1.85	2.00	----	----	----	----	6064
	38		25	50/40	2.65	2.90 (114)	1.55	----	----	----	----	----	----	----	1377
Gulton 6 A.H.	65	3	15	0	4.50		5.45	5.35	5.15	4.50	4.50	5.15	4.20		
	66		25	0	4.25		5.00	3.50	2.50	3.80	3.90	3.45	----	----	4414
	17		25	25	5.80		3.65	3.45	2.50	2.30	----	----	----	----	2885
	18		40	25	4.55		4.95	3.16	----	----	----	----	----	----	1550
	41		15	50/40	2.75	4.55 (239)	2.05	1.63	----	----	----	----	----	----	1689
	42		25	50/40	2.60	3.80 (96)	2.15	2.10	2.35	1.85	1.50	1.30	----	----	4133

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING			CAPACITY CHECKS AFTER 88-DAY INTERVALS								CYCLES TO PACK FAILURE
					INITIAL	* (See Note)		FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
G.E. 12 A.H.	110	1.5	15	0	13.9			12.7	10.4	13.0	12.5	14.1	13.7	14.3		
	124		25	0	14.2			13.5	12.9	12.8	11.4	11.5	11.7	10.8		
	82		25	25	15.2			8.00	5.55	5.50	5.40	5.70	5.00	4.70		
	96		40	25	14.8			6.00	7.65	----	----	----	----	----	----	4020
	85		15	50/40	6.80	8.20	(334)	5.00	4.70	5.00	4.90	5.00	1.90	4.30		
	99		25	50/40	6.90	6.00	(195)	4.90	5.20	4.40	----	----	----	----	----	4853
G.E. 12 A.H.	111	3	15	0	14.2			13.2	10.7	11.0	12.1	12.9	12.0	11.4		
	125		25	0	14.6			13.0	12.1	11.9	12.2	12.9	11.7	11.2		
	83		25	25	15.2			11.7	8.20	6.13	5.20	4.80	4.40	5.10		
	97		40	25	14.9			5.60	5.86	7.90	8.20	6.80	5.50	5.70		
	86		15	50/40	7.10	8.20	(205)	6.30	3.70	4.00	3.50	2.90	2.30	4.40		
	100		25	50/40	7.00	9.80	(70)	3.80	4.70	5.70	5.10	4.00	4.00			
Gould 20 A.H.	84	1.5	15	0	22.5			27.7	26.5	24.2	24.7	21.7	22.3	19.8		
	98		25	0	23.1			21.2	15.2	18.7	17.2	17.5	13.5	13.5		
	104		25	25	25.0			18.5	14.0	----	----	----	----	----	----	2980
	118		40	25	24.7			23.3	----	----	----	----	----	----	----	2937
	112		15	50/40	9.67	6.83	(183)	15.7	15.3	12.5	12.4	----	----	----	----	5213
	126		25	50/40	9.00	13.9	(1326)	15.2	----	----	----	----	----	----	----	1574
Gould 20 A.H.	80	3	15	0	23.0			23.2	21.5	20.3	25.8	19.7	18.3	16.7		
	94		25	0	23.0			17.5	25.0	18.2	18.8	16.8	17.0	15.8		
	105		25	25	23.3			23.5	22.2	21.3	21.2	20.7	10.5	20.5		
	119		40	25	24.8			24.7	21.7	----	----	----	----	----	----	1793
	108		15	50/40	9.50	9.67	(47)	11.8	14.8	16.8	15.2	12.3				
	122		25	50/40	9.33	7.50	(756)	8.17**	----	----	----	----	----	----	----	983

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
** Still at 50° C.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	PRECONDITIONING			CAPACITY CHECKS AFTER 88-DAY INTERVALS							CYCLES TO PACK FAILURE
					INITIAL	* (See Note)		FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	
Gulton 20 A.H.	101	1.5	15	0	17.2			12.5	5.67	----	----	----	----	----	----	3631
	115		25	0	17.7			11.2	----	----	----	----	----	----	----	2288
	73		25	25	23.3			7.17	9.50	7.83	8.67	8.83	----	----	----	7763
	87		40	25	23.3			----	----	----	----	----	----	----	----	627
	76		15	50/40	10.3	13.8	(172)	6.50	4.83	5.50	4.67	5.00	5.17			
	90		25	50/40	9.00	11.3	(65)	6.00	10.3	7.35**	----	----	----	----	----	4045
Gulton 20 A.H.	102	3	15	0	16.7			18.8	25.2	20.3	19.5	17.3	17.0	15.0		
	116		25	0	21.7			20.7	21.8	19.3	17.5	15.2	15.8	13.5		
	74		25	25	20.3			6.17	7.17	----	----	----	----	----	----	1754
	88		40	25	19.8			----	----	----	----	----	----	----	----	358
	77		15	50/40	9.50	12.7	(71)	7.33	5.33	4.83	5.33	4.67	5.00	5.17		
	91		25	50/40	9.17	10.3	(47)	6.67	6.67	7.67	6.83	7.17	5.50			
Yardney 12 A.H.	57	24	50	0	13.8			8.60	----	----	----	----	----	----	----	166
	33		50	40	13.5			12.0	----	----	----	----	----	----	----	210
Gulton 6 A.H.	79	24	50	25	6.60			3.55	4.40	4.25	4.05	3.50				
									(40°C)	(40°C)						
G.E. 12 A.H.	93	24	50	40 ***	13.0			7.60	6.50	5.00	----	----	----	----	----	349
Gulton 50 A.H.	95	1.5	25	0	54.6			59.6	45.4	----	----	----	----	----	----	3227
	123		15	40	27.9											

* Preconditioning at change to 40° C. Number of cycles completed at 50° C is in parentheses.
** Two cells only; pack failed during capacity check.
*** Changed from 25° to 40° C ambient after 173 cycles.

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDI-TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Sonotone (Triple Sealed) 3 A.H.	243	1.5	15	0	3.23	3.55	3.47	3.50								
	231		25	0	2.88	3.05	2.78	2.72								
	203		25	25	3.35	1.40	1.17									
	202		40	25	3.60	1.32										
	226		15	40	3.53											
	237		25	40	3.48	1.05										
Sonotone (Stabis-tor) 5 A.H.	175	1.5	25	-20	4.92											
	289		40	-20	4.96											
	92		25	0	3.38	2.92										
	322		40	0	4.13	2.42										
	273		25	25	5.33	2.33										
	287		40	25	5.50	3.66										
	299		25	40	4.21	1.88										
	312		40/15	40	3.71	1.04										

58

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C.	INITIAL PRECONDI-TIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS: FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	CYCLES TO PACK FAILURE
Gulton (Comm.) 4 A.H.	315	1.5	15	0	5.04	3.57	4.03	4.00	3.80	4.07						
	326		25	0	4.87	4.00	3.87	3.73	[illegible]							
	204		25	25	4.63	2.47	2.07	1.83	1.80	3.67	1.83					
	214		40	25	5.00	2.00	2.07	1.87	1.93	1.93						
	228		15	40	4.20	1.77	1.67	1.47	1.53	1.93						
	240		25	40	3.37	1.17	1.13	1.30	1.03	1.30						
Gulton 12 A.H.	216	1.5	15	0	14.0	14.0	14.1	14.2								
	301		25	0	14.2	14.5	14.4	14.2								
	227		25	25	14.1	5.90	3.50	4.10								
	296		40	25	13.3	4.70	5.40	5.00								
	78		15	40	6.80	4.30	3.10	3.30								
	290		25	40	11.4	5.40	3.60	3.70								
Gulton (HSI) 6 A.H.	213	1.5	25	0	7.30	7.30	7.25	7.20								
	218		40	25	6.90	3.00	3.60	3.20								
	238		25	40	5.00	1.75	2.00	1.35								
Yardney (AgZn)	9	24	42	25	14.0											57

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Nimbus) 5 A.H.	117	1.5	15	0	5.00	5.17	5.46									
	121		25	0	5.38	5.38	5.33									
	120		15	25	5.25	5.40	4.17									
	318		25	25	5.46	2.55	1.67									
	127		15	40	3.29	1.67	1.50									
	128		25	40	3.04	1.42	1.54									
Gulton 6 A.H. (Third elec-trode)	59	1.5	25	0	7.15	7.00	6.20									
	71		40	0	7.25	7.50	1.00									
	11		40	25	7.10	3.15	6.20	4.35								
	23		25	25	5.95	3.85	5.20	4.00								
	35		15	40	2.95	2.25	1.60									
	47		25	40	3.95	2.10	2.05									
G.E. (Nimbus) 5 A.H.	103	1.5	15	0	5.42	5.08	5.38									
	107		25	0	5.21	5.50	5.46									
	106		15	25	4.67	4.13	4.13	3.50								
	304		25	25	5.58	3.58	3.54									
	113		15	40	3.67	2.42	2.25	1.85								
	114		25	40	3.83	2.25	1.71									
G.E. 12 A.H. (Third elec-trode)	60	1.5	25	0	15.0											
	72															
	12		25	25	10.2											
	24		40	25	9.10											
	36															
	48		25/40	40/0	5.30* 15.2											

* At 40° C.

09

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	INITIAL PRECONDITIONING	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
						FIRST 88 DAYS	SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Gulton (Neoprene seal folded) 5.6 A.H.	244	1.5	25	-20												
	200		25	0												
	276		25	25	5.60											
	242		25	40	4.39											
Gulton (Neoprene seal non-folded) 5.6 A.H.	232	1.5	25	-20												
	390		25	0												
	396		25	25	6.30											
	230		25	40	4.90											
Yardney (C-3 Separator) 5 A.H.	257	24	20	0	3.67	1.83										
	21		20	25	4.93	.76										
	45		20	40	6.02											
Yardney (Radiated Separator) 5 A.H.	409		20	25	5.25											
	233		20	25	5.20											
Yardney (Pellon Control Separator) 5 A.H.	69		20	25	5.38											

19

AMPERE-HOUR CAPACITIES ON PRECONDITIONING AND CAPACITY CHECK CYCLES

TYPE	PACK NUMBER	ORBIT PERIOD (Hours)	DEPTH OF DISCHARGE	TEMPERATURE °C	CAPACITY CHECKS AFTER 88-DAY INTERVALS										CYCLES TO PACK FAILURE
					INITIAL PRECONDI-TIONING	FIRST 88 DAYS / SECOND 88 DAYS	THIRD 88 DAYS	FOURTH 88 DAYS	FIFTH 88 DAYS	SIXTH 88 DAYS	SEVENTH 88 DAYS	EIGHTH 88 DAYS	NINTH 88 DAYS	TENTH 88 DAYS	
Delco (Silver-Zinc) 25 A.H.	609	24	40	25	29.7										
Gulton (Neoprene seal folded) 3.6 A.H.	239	1.5	40	25	3.06										
Yardney (Silver-Cadimum) 12 A.H.	185	1.5	25	-20											
	197		25	0											
	182		25	25											

29

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
G.E. (pages 72-76)	3	63	0	0.5	1.0	15	115	1.55	12441	12889	448	10	10
		64	0	"	"	25	"	"	12415	12863	448	10	10
		15	25	"	"	25	125	1.49		FAILED			
		16	25	"	"	40	"	"		FAILED			
		39	40	"	"	15	160	1.45		FAILED			
		40	40	"	"	25	"	1.41		FAILED			
		67	0	"	2.5	15	115	1.55	5995	6231	236	10	10
		62	0	"	"	25	"	"	6080	6338	258	10	10
		19	25	"	"	25	125	1.49	6055	6313	258	10	10
		20	25	"	"	40	"	"		FAILED			
		43	40	"	"	15	160	1.45		FAILED			
		44	40	"	"	25	"	"		FAILED			
GOULD (pages 77-80)	3.5	51	0	"	1.0	15	115	1.55	12458	12906	448	10	10
		52	0	"	"	25	"	"	12124	12572	448	5	5
		3	25	"	"	25	125	1.49		FAILED			
		4	25	"	"	40	"	"		FAILED			
		27	40	"	"	15	160	1.45		FAILED			
		28	40	"	"	25	"	"		FAILED			
		55	0	"	2.5	15	115	1.55	6073	6331	258	10	10
		56	0	"	"	25	"	"	6046	6254	208	10	10
		7	25	"	"	25	125	1.49		FAILED			
		8	25	"	"	40	"	"		FAILED			
		31	40	"	"	15	160	1.45		FAILED			
		32	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
		49	0	0.5	1.0	15	115	1.55	12053	12500	447	8	8
		50	0	"	"	25	"	"	12070	12491	421	10	9
		1	25	"	"	25	125	1.49		FAILED			
		2	25	"	"	40	"	"		FAILED			
		25	40	"	"	15	160	1.45		FAILED			
		26	40	"	"	25	"	"		FAILED			
SONOTONE (pages 81-86)	5	53	0	"	2.5	15	115	1.55	5939	6197	256	10	10
		54	0	"	"	25	"	"	5920	6128	208	10	10
		5	25	"	"	25	125	1.49	5783	6041	258	8	8
		6	25	"	"	40	"	"		FAILED			
		29	40	"	"	15	160	1.45	5605	5785	180	6	5
		30	40	"	"	25	"	"		FAILED			
		61	0	"	1.0	15	115	1.55		FAILED			
		62	0	"	"	25	"	"	11743	12190	447	6	6
		13	25	"	"	25	125	1.49		FAILED			
		14	25	"	"	40	"	"		FAILED			
		37	40	"	"	15	160	1.45		FAILED			
		38	40	"	"	25	"	"		FAILED			
GULTON (pages 87-88)	6	65	0	"	2.5	15	115	1.55	5852	6110	258	8	8
		66	0	"	"	25	"	"		FAILED			
		17	25	"	"	25	125	1.49		FAILED			
		18	25	"	"	40	"	"		FAILED			
		41	40	"	"	15	160	1.45		FAILED			
		42	40	"	"	25	"	"		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
G. E. (pages 89 - 94)	12	110	0	0.5	1.0	15	115	1.55	11835	12282	447	5	5
		124	0	"	"	25	"	"	11602	12049	447	5	5
		82	25	"	"	25	125	1.49		FAILED			
		96	25	"	"	40	"	"		FAILED			
		85	40	"	"	15	160	1.45		FAILED			
		99	40	"	"	25	"	"		FAILED			
		111	0	"	2.5	15	115	1.55	5899	6107	208	5	5
		125	0	"	"	25	"	"	5892	6100	208	5	5
		83	25	"	"	25	125	1.49	5905	6113	208	5	5
		97	25	"	"	40	"	"		FAILED			
		86	40	"	"	15	160	1.45	5710	5918	208	5	5
		100	40	"	"	25	"	"		FAILED			
GOULD (pages 95 - 98)	20	84	0	"	1.0	15	115	1.55	11783	12230	447	5	5
		98	0	"	"	25	"	"		FAILED			
		104	25	"	"	25	125	1.49		FAILED			
		118	25	"	"	40	"	"		FAILED			
		112	40	"	"	15	160	1.45		FAILED			
		126	40	"	"	25	"	1.41		FAILED			
		80	0	"	2.5	15	115	1.55	5869	6103	234	5	5
		94	0	"	"	25	"	"	5729	5987	258	5	5
		105	25	"	"	25	125	1.49	5582	5751	169	3	0
		119	25	"	"	40	"	"		FAILED			
		108	40	"	"	15	160	1.45		FAILED			
		122	40	"	"	25	"	1.41		FAILED			

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
GULTON (pages 99-101)	20	101	0	0.5	1.0	15	115	1.55		FAILED			
		115	0	"	"	25	"	"		FAILED			
		73	25	"	"	25	125	1.49		FAILED			
		87	25	"	"	40	"	"		FAILED			
		76	40	"	"	15	160	1.45		FAILED			
		90	40	"	"	25	"	"		FAILED			
		102	0	"	2.5	15	115	1.55	5697	5931	234	4	4
		116	0	"	"	25	"	"	5517	5775	258	5	5
		74	25	"	"	25	125	1.49		FAILED			
		88	25	"	"	40	"	"		FAILED			
		77	40	"	"	15	160	1.45	5645	5819	174	4	3
		91	40	"	"	25	"	"		FAILED			
G.E. NIMBUS (pages 102-107)	5	103	0	"	1.0	15	110	1.49	4729	5176	447	5	5
		107	0	"	"	25	"	"	4082	4530	448	5	5
		106	25	"	"	15	120	"	4749	5197	448	5	5
		304	25	"	"	25	"	"	4052	4500	448	5	5
		113	40	"	"	15	130	"	4751	4989	238	5	5
		114	40	"	"	25	"	"	4021	4469	448	5	5
GULTON NIMBUS (pages 108-113)	5	117	0	"	"	15	110	"	4506	4970	464	5	5
		121	0	"	"	25	"	"	4084	4532	448	5	5
		120	25	"	"	15	120	"	4673	5072	399	5	5
		318	25	"	"	25	"	"	4052	4451	399	5	5
		127	40	"	"	15	130	"	4672	5117	445	5	5
		128	40	"	"	25	"	"	3966	4394	428	4	4

MFR.	CAPACITY A. H.	PACK NO.	TEMP °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
GULTON	6 (THIRD ELECTRODE)	59	0	0.5	1.0	25	—	—	4551	5010	459	4	4
		71	0	"	"	40	—	—	4534	5069	535	4	4
		11	25	"	"	40	—	—	5681	6191	510	4	4
		23	25	"	"	25	—	—	5665	6174	519	5	5
(pages 114-119)		35	40	"	"	15	—	—	3586	4171	585	5	5
		47	40	"	"	25	—	—	4331	4841	510	5	5
G.E.	12 (THIRD ELECTRODE)	60	0	"	"	25	—	—	2181	2692	511	5	5
		72	0	"	"	40	—	—					
		12	25	"	"	25	—	—		DISCONTINUED			
		24	25	"	"	40	—	—		DISCONTINUED			
(pages 120-121)		36	40	"	"	15	—	—					
		48	40	"	"	25	—	—	1522	2030	508	5	5
SONOTONE	5 (STABISTOR)	175	-20	"	"	25	—	—	1818	2089	271	3	3
		289	-20	"	"	40	—	—		FAILED			
		92	0	"	"	25	—	—	2671	3071	400	5	4
		322	0	"	"	40	—	—	2463	3852	389	4	4
		273	25	"	"	25	—	—	3001	3440	439	3	3
		287	25	"	"	40	—	—		FAILED			
(pages 122-127)		299	40	"	"	25	—	—	2722	3170	448	5	5
		312	40	"	"	40	—	—	2815	3262	447	4	4
GULTON 128-131	1.25	174	-20	"	"	25	—	—	0	90	90	5	5
		388	-20	"	"	60 Adj 40	—	—	0	37	37	5	5
		198	0	"	"	60	—	—	0	381	381	5	5
		308	0	"	"	25	—	—	0	381	381	5	5

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
GULTON (pages 135-138)	4	315	0	0.5	1.0	15	115	1.55	8539	8986	447	5	5
		326	0	"	"	25	"	"	9010	9457	447	5	5
		204	25	"	"	25	125	1.49	8811	9259	448	5	5
		214	25	"	"	40	"	"	8370	8474	104	4	3
		228	40	"	"	15	160	1.45	8704	9152	448	5	5
		240	40	"	"	25	"	"	8738	9186	448	4	4
GULTON (pages 138-141)	12	216	0	"	"	15	115	1.55	5747	6195	448	5	5
		301	0	"	"	25	115	1.55	6611	7058	447	4	4
		227	25	"	"	25	125	1.49	6004	6452	448	5	5
		296	25	"	"	40	125	1.49		FAILED			
		78	40	"	"	15	160	1.45	6564	7013	449	4	4
		290	40	"	"	25	160	1.45		FAILED			
GULTON (pages 142-144)	(HSI) 6	213	0	"	"	25	115	1.55	5714	6161	447	5	5
		218	25	"	"	40	125	1.49	5584	6014	430	4	4
		238	40	"	"	25	160	1.45	5216	5733	447	3	3
SONOTONE (pages 145-152)	3 (TRIPLE SEALED)	243	0	"	"	15	115	1.55	3607	4046	439	5	5
		231	0	"	"	25	115	"	3607	4046	439	5	5
		203	25	"	"	25	125	1.49	3766	4214	448	5	5
		202	25	"	"	40	125	"	3447	3894	447	4	4
		226	40	"	"	15	160	1.45	3595	3993	398	5	5
		237	40	"	"	25	160	"	3565	4012	447	5	5

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
YARDNEY (pages 151-153)	5.0	257	0	1.0	23.0	20	(.30*A)	1.50	158	190	32	5	5
		409	25	"	"	"	"	"		FAILED			
		21	25	"	"	"	"	"		FAILED			
		69	25	"	"	"	"	"	115	147	32	5	5
		45	40	"	"	"	"	"		FAILED			
		233	25	"	"	"	"	"	115	147	32	5	5
GULTON 154-161	5.6	232	-20	0.5	1.0	25	115	1.55	860	1304	444	5	5
		244	-20	"	"	"	"	"	860	1304	444	5	5
		200	0	"	"	"	"	"	1137.	1576	439	5	5
		390	0	"	"	"	"	"	1155	1602	447	5	5
		276	25	"	"	"	125	1.49	1268	1653	385	5	5
		396	25	"	"	"	"	"	1286	1718	432	5	5
		230	40	"	"	"	160	1.45	1196	1295	99	5	0
		242	40	"	"	"	"	"	1375	1775	400	5	5
GULTON Coulometer 162	3.6	239	25	"	"	40	(3.6*A)	1.48	1682	1873	191	10	10
SONOTONE Coulometer page 163	5.0		25	0.5	1.0	30	(0.30A*)	—	7535	8024	489	5	5
GULTON Sherfey page 164	3.6		25	0.5	1.0	40	60	—	2816	3310	494	9	8

69

* DOES NOT APPLY

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
YARDNEY 165-167	12.0	185	-20	0.5	1.0	25	130	1.60	93	214	121	5	5
		197	0	"	"	"	"	1.58	78	106	28	5	5
		182	25	"	"	"	"	1.55	661	1108	447	5	5
DELCO Page 168	20.0	609	25	1.0	23.0	40	*	1.97	73	104	31	10	10

* Does not apply

MFR.	CAPACITY A. H.	PACK NO.	TEMP. °C.	ORBIT PERIOD (HRS.) DISCHARGE	ORBIT PERIOD (HRS.) CHARGE	PERCENT DEPTH OF DISCHARGE	PERCENT OF RECHARGE	CHARGE VOLTAGE LIMIT	CYCLES COVERED INITIAL	CYCLES COVERED FINAL	CYCLES COVERED DIFFERENCE	CELLS REMAINING IN PACK INITIAL	CELLS REMAINING IN PACK FINAL
YARDNEY	12	57	0	1.0	23.0	50	*	1.50		FAILED			
		33	40	"	"	"	*	1.50		FAILED			
GULTON (page)	6	79	25	1.0	23.0	50	200	1.49		FAILED			
G.E. (page)	12	93	25**	1.0	23.0	50	200***	1.49**		FAILED			
GULTON (page)	50	95	0	0.5	1.0	25	115	1.55		FAILED			
		123	40	"	"	15	160	1.45		FAILED			
DELCO (pages)	25	75	25	1.0	23.0	40	*	1.97		FAILED			
		89	25	"	"	"	*	"		FAILED			
		288	25	0.5	2.5	"	*	"		DISCONTINUED			
	(NaOH) →	188	25	"	"	"	*	"		FAILED			
DELCO (pages)	40	275	25	1.0	23.0	25	*	1.97		DISCONTINUED			
YARDNEY	12 Ag-Zn, Limited electrolyte	9	25	1.0	23.0	42 (5 amps)	(500* Ma.)	1.97		FAILED			

* DOES NOT APPLY

** CHANGE TO 40°C, 1.45 V/CELL LIMIT AFTER CYCLE 173.

14

PACK NO. 63
G.E. 3 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12478.	12.35	.91	1.24	1.25	1.25	1.22	1.24	1.23	1.23	1.22	1.23	1.22	END OF DISCHARGE
12503.	12.33	.91	1.24	1.24	1.25	1.22	1.24	1.22	1.23	1.22	1.23	1.22	
12580.	12.31	.91	1.23	1.25	1.24	1.21	1.24	1.22	1.23	1.22	1.23	1.22	
12610.	12.34	.90	1.23	1.25	1.25	1.22	1.24	1.23	1.23	1.22	1.24	1.23	
12679.	12.34	.90	1.23	1.24	1.25	1.22	1.23	1.22	1.23	1.22	1.23	1.23	
12711.	12.26	.91	1.22	1.24	1.25	1.21	1.21	1.22	1.22	1.21	1.22	1.22	
12744.	12.28	.90	1.23	1.24	1.24	1.21	1.23	1.22	1.23	1.22	1.23	1.23	
12793.	12.53	.90	1.26	1.26	1.26	1.24	1.26	1.25	1.24	1.25	1.25	1.25	
12826.	12.50	.90	1.25	1.26	1.26	1.23	1.25	1.25	1.24	1.25	1.25	1.24	
12889.	12.54	.90	1.26	1.26	1.27	1.24	1.25	1.25	1.24	1.25	1.25	1.25	
		.52											
12478.	15.53	.23	1.60	1.48	1.61	1.55	1.65	1.58	1.48	1.52	1.48	1.54	END OF CHARGE
12503.	15.51	.22	1.59	1.48	1.61	1.55	1.64	1.58	1.48	1.52	1.47	1.55	
12580.	15.51	.24	1.56	1.48	1.61	1.55	1.64	1.59	1.49	1.51	1.48	1.55	
12610.	15.44	.22	1.55	1.48	1.61	1.55	1.62	1.58	1.49	1.51	1.48	1.54	
12679.	15.42	.24	1.57	1.48	1.60	1.55	1.60	1.58	1.49	1.51	1.48	1.54	
12711.	15.46	.23	1.55	1.48	1.61	1.55	1.60	1.59	1.48	1.52	1.47	1.55	
12744.	15.43	.22	1.55	1.48	1.60	1.54	1.62	1.58	1.48	1.52	1.47	1.55	
12793.	15.71	.18	1.59	1.50	1.60	1.50	1.64	1.60	1.52	1.56	1.51	1.59	
12826.	15.74	.21	1.60	1.49	1.61	1.57	1.64	1.61	1.51	1.57	1.50	1.57	
12889.	15.71	.21	1.62	1.49	1.62	1.57	1.65	1.62	1.50	1.55	1.49	1.57	

PACK NO. 64 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12448.	12.03	1.50	1.20	1.22	1.21	1.21	1.22	1.20	1.20	1.20	1.20	1.19	END OF
12477.	12.01	1.48	1.20	1.21	1.21	1.21	1.22	1.20	1.20	1.19	1.20	1.18	DISCHARGE
12555.	12.01	1.49	1.20	1.21	1.21	1.21	1.22	1.20	1.20	1.19	1.20	1.19	
12584.	11.99	1.49	1.20	1.21	1.21	1.21	1.21	1.20	1.20	1.19	1.19	1.18	
12653.	12.01	1.51	1.20	1.20	1.21	1.21	1.22	1.20	1.20	1.19	1.19	1.18	
12684.	11.96	1.51	1.20	1.20	1.20	1.20	1.20	1.19	1.19	1.18	1.19	1.18	
12767.	12.19	1.52	1.22	1.23	1.22	1.22	1.23	1.21	1.22	1.21	1.21	1.20	
12800.	12.13	1.52	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.20	1.21	1.20	
12863.	12.15	1.51	1.22	1.22	1.22	1.22	1.22	1.21	1.21	1.21	1.21	1.20	
		.86											
12448.	15.44	.34	1.51	1.54	1.61	1.65	1.52	1.51	1.50	1.51	1.53	1.52	END OF
12477.	15.40	.33	1.50	1.53	1.61	1.64	1.52	1.51	1.50	1.51	1.53	1.53	CHARGE
12555.	15.40	.32	1.51	1.53	1.61	1.64	1.52	1.51	1.50	1.51	1.53	1.53	
12584.	15.35	.32	1.50	1.53	1.59	1.63	1.51	1.50	1.49	1.52	1.52	1.52	
12653.	15.38	.35	1.51	1.52	1.60	1.63	1.52	1.50	1.49	1.51	1.52	1.51	
12684.	15.43	.33	1.51	1.53	1.62	1.64	1.51	1.50	1.50	1.52	1.53	1.51	
12767.	15.48	.33	1.51	1.52	1.60	1.63	1.51	1.54	1.54	1.50	1.55	1.51	
12800.	15.47	.35	1.50	1.53	1.60	1.64	1.52	1.54	1.52	1.51	1.55	1.51	
12863.	15.42	.34	1.49	1.53	1.60	1.63	1.51	1.52	1.51	1.52	1.55	1.53	

PACK NO. 67 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
G.E. 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
6051.	12.43	.91	1.25	1.25	1.23	1.26	1.25	1.24	1.25	1.23	1.24	1.23	END OF
6089.	12.38	.91	1.24	1.25	1.22	1.24	1.25	1.24	1.24	1.23	1.24	1.23	DISCHARGE
6146.	12.37	.91	1.24	1.24	1.22	1.24	1.25	1.24	1.23	1.23	1.23	1.23	
6190.	12.34	.91	1.24	1.24	1.21	1.24	1.24	1.24	1.23	1.22	1.23	1.23	
		.21											
6051.	15.76	.09	1.61	1.50	1.52	1.60	1.57	1.62	1.56	1.58	1.57	1.60	END OF
6089.	15.76	.09	1.60	1.49	1.48	1.59	1.63	1.61	1.57	1.57	1.56	1.60	CHARGE
6146.	15.72	.11	1.59	1.48	1.49	1.59	1.64	1.62	1.55	1.59	1.52	1.60	
6190.	15.68	.10	1.58	1.47	1.49	1.57	1.62	1.61	1.54	1.59	1.52	1.60	

44

PACK NO. 68 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
6146.	12.01	1.50	1.19	1.20	1.20	1.22	1.21	1.20	1.21	1.20	1.17	1.20	END OF
6202.	12.01	1.51	1.19	1.19	1.20	1.21	1.21	1.21	1.21	1.20	1.18	1.20	DISCHARGE
6245.	11.94	1.52	1.19	1.19	1.19	1.21	1.20	1.20	1.20	1.19	1.17	1.20	
		.34											
6146.	15.76	.14	1.65	1.66	1.56	1.60	1.61	1.61	1.54	1.61	1.38	1.51	END OF
6202.	15.80	.18	1.66	1.66	1.59	1.54	1.61	1.62	1.55	1.62	1.39	1.52	CHARGE
6245.	15.89	.16	1.66	1.66	1.60	1.54	1.64	1.63	1.57	1.63	1.38	1.53	

PACK NO. 19 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
G.E. 3 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
6121.	11.89	1.51	1.19	1.20	1.19	1.20	1.20	1.19	1.18	1.18	1.18	1.18	END OF
6177.	11.92	1.50	1.19	1.19	1.19	1.20	1.20	1.19	1.19	1.18	1.19	1.18	DISCHARGE
6220.	11.86	1.49	1.19	1.19	1.00	1.19	1.20	1.18	1.18	1.17	1.18	1.18	
6313.	12.01	1.50	1.20	1.21	1.21	1.21	1.20	1.20	1.19	1.19	1.20	1.20	
		.38											
6121.	14.47	.38	1.45	1.47	1.45	1.43	1.46	1.44	1.43	1.43	1.44	1.43	END OF
6177.	14.57	.38	1.46	1.47	1.46	1.44	1.47	1.45	1.45	1.44	1.45	1.44	CHARGE
6220.	14.56	.38	1.46	1.47	1.46	1.43	1.46	1.45	1.44	1.44	1.45	1.45	
6313.	14.59	.38	1.46	1.48	1.47	1.44	1.46	1.45	1.45	1.44	1.45	1.45	

96

PACK NO. 51 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GOULD 3.5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12495.	12.32	1.05	1.24	1.23	1.22	1.24	1.24	1.24	1.23	1.20	1.22	1.25	END OF
12520.	12.30	1.05	1.24	1.23	1.22	1.24	1.23	1.26	1.23	1.19	1.20	1.25	DISCHARGE
12597.	12.27	1.06	1.23	1.23	1.21	1.21	1.24	1.25	1.23	1.17	1.23	1.23	
12627.	12.31	1.05	1.24	1.23	1.22	1.23	1.24	1.25	1.23	1.18	1.21	1.29	
12696.	12.17	1.05	1.23	1.22	1.21	1.23	1.24	1.24	1.23	1.11	1.20	1.22	
12728.	12.12	1.05	1.23	1.22	1.21	1.23	1.22	1.24	1.22	1.09	1.21	1.20	
12761.	12.14	1.05	1.23	1.22	1.20	1.24	1.23	1.24	1.22	1.10	1.21	1.20	
12810.	12.46	1.05	1.25	1.24	1.23	1.24	1.25	1.24	1.23	1.24	1.25	1.25	
12843.	12.45	1.05	1.25	1.24	1.23	1.23	1.24	1.25	1.24	1.24	1.27	1.24	
12906.	12.48	1.05	1.25	1.24	1.23	1.24	1.25	1.25	1.24	1.23	1.27	1.25	
		.60											
12495.	15.21	.62	1.56	1.59	1.60	1.47	1.59	1.48	1.56	1.44	1.44	1.46	END OF
12520.	15.24	.59	1.56	1.58	1.60	1.46	1.56	1.59	1.56	1.43	1.42	1.45	CHARGE
12597.	15.23	.62	1.55	1.58	1.58	1.44	1.57	1.59	1.55	1.42	1.45	1.45	
12627.	15.38	.59	1.55	1.58	1.59	1.45	1.59	1.60	1.56	1.43	1.43	1.58	
12696.	15.19	.61	1.55	1.57	1.59	1.45	1.58	1.59	1.55	1.42	1.42	1.42	
12728.	15.30	.61	1.56	1.59	1.60	1.46	1.57	1.61	1.56	1.44	1.44	1.42	
12761.	15.30	.60	1.56	1.59	1.60	1.46	1.58	1.60	1.57	1.44	1.44	1.41	
12810.	15.49	.42	1.56	1.57	1.58	1.43	1.60	1.60	1.56	1.56	1.52	1.48	
12843.	15.45	.50	1.56	1.58	1.59	1.42	1.56	1.57	1.56	1.55	1.56	1.45	
12906.	15.41	.51	1.56	1.58	1.60	1.44	1.57	1.59	1.56	1.47	1.55	1.45	

PACK NO. 52 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GOULD 3.5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12157.	5.93	1.75	1.19	1.20	.00	1.19	1.21	1.19	.00	.00	.00	.00	END OF
12186.	5.92	1.73	1.18	1.20	.00	1.19	1.21	1.19	.00	.00	.00	.00	DISCHARGE
12264.	5.89	1.76	1.17	1.19	.00	1.19	1.20	1.19	.00	.00	.00	.00	
12293.	5.91	1.76	1.20	1.18	.00	1.19	1.20	1.19	.00	.00	.00	.00	
12362.	5.92	1.75	1.20	1.18	.00	1.19	1.21	1.19	.00	.00	.00	.00	
12393.	5.93	1.74	1.18	1.21	.00	1.19	1.19	1.19	.00	.00	.00	.00	
12438.	5.93	1.73	1.19	1.20	.00	1.19	1.19	1.19	.00	.00	.00	.00	
12476.	5.94	1.77	1.20	1.18	.00	1.20	1.21	1.19	.00	.00	.00	.00	
12509.	5.90	1.77	1.19	1.15	.00	1.20	1.20	1.19	.00	.00	.00	.00	
12572.	5.95	1.76	1.19	1.19	.00	1.20	1.20	1.19	.00	.00	.00	.00	
		1.00											
12157.	7.87	.64	1.53	1.56	.00	1.62	1.59	1.60	.00	.00	.00	.00	END OF
12186.	7.85	.65	1.51	1.58	.00	1.62	1.59	1.60	.00	.00	.00	.00	CHARGE
12264.	7.85	.68	1.50	1.55	.00	1.63	1.60	1.61	.00	.00	.00	.00	
12293.	7.84	.66	1.54	1.51	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12362.	7.82	.73	1.55	1.49	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12393.	7.88	.64	1.50	1.60	.00	1.62	1.58	1.60	.00	.00	.00	.00	
12438.	7.87	.64	1.52	1.55	.00	1.62	1.59	1.60	.00	.00	.00	.00	
12476.	7.76	.55	1.54	1.46	.00	1.63	1.58	1.59	.00	.00	.00	.00	
12509.	7.74	.60	1.52	1.44	.00	1.63	1.58	1.60	.00	.00	.00	.00	
12572.	7.74	.58	1.51	1.46	.00	1.62	1.58	1.59	.00	.00	.00	.00	

84

PACK NO. 55 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GOULD 3.5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
6139.	12.34	1.06	1.23	1.24	1.24	1.23	1.24	1.22	1.23	1.23	1.23	1.23	END OF
6195.	12.31	1.06	1.23	1.23	1.24	1.23	1.23	1.22	1.22	1.22	1.23	1.23	DISCHARGE
6238.	12.32	1.06	1.24	1.24	1.24	1.23	1.23	1.22	1.22	1.22	1.23	1.23	
6331.	12.46	1.06	1.25	1.25	1.26	1.25	1.24	1.24	1.24	1.24	1.24	1.24	
		.24											
6139.	15.25	.23	1.52	1.55	1.52	1.53	1.54	1.51	1.51	1.51	1.51	1.50	END OF
6195.	15.28	.24	1.52	1.57	1.53	1.53	1.53	1.52	1.51	1.52	1.51	1.50	CHARGE
6238.	15.29	.24	1.53	1.56	1.53	1.54	1.53	1.52	1.52	1.52	1.51	1.50	
6331.	15.32	.24	1.53	1.55	1.54	1.55	1.54	1.52	1.52	1.52	1.51	1.51	

PACK NO. 56 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GOULD 3.5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.75	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
6074.	12.02	1.77	1.20	1.21	1.21	1.21	1.20	1.20	1.20	1.20	1.20	1.20	END OF
6112.	12.01	1.77	1.20	1.21	1.20	1.21	1.21	1.19	1.19	1.19	1.19	1.20	DISCHARGE
6169.	12.05	1.76	1.20	1.20	1.21	1.21	1.21	1.20	1.20	1.19	1.19	1.20	
6213.	11.96	1.79	1.20	1.20	1.20	1.20	1.19	1.19	1.19	1.19	1.19	1.19	
		.40											
6074.	15.54	.33	1.55	1.56	1.51	1.59	1.57	1.56	1.53	1.54	1.55	1.56	END OF
6112.	15.52	.34	1.55	1.56	1.51	1.59	1.57	1.55	1.53	1.54	1.54	1.54	CHARGE
6169.	15.53	.34	1.54	1.55	1.52	1.59	1.57	1.55	1.53	1.53	1.54	1.55	
6213.	15.56	.32	1.55	1.56	1.50	1.60	1.56	1.56	1.52	1.54	1.55	1.56	

PACK NO. 49 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12084.	9.73	1.50	1.21	1.21	.00	1.20	1.21	1.22	1.23	1.23	.00	1.22	END OF
12114.	9.73	1.50	1.21	1.21	.00	1.20	1.22	1.22	1.23	1.23	.00	1.22	DISCHARGE
12153.	9.69	1.51	1.20	1.21	.00	1.20	1.21	1.21	1.23	1.22	.00	1.22	
12221.	9.70	1.50	1.20	1.21	.00	1.20	1.21	1.21	1.23	1.22	.00	1.22	
12290.	9.68	1.51	1.20	1.20	.00	1.20	1.21	1.20	1.23	1.22	.00	1.22	
12322.	9.65	1.52	1.20	1.20	.00	1.19	1.19	1.21	1.22	1.22	.00	1.21	
12355.	9.62	1.50	1.19	1.19	.00	1.19	1.19	1.20	1.22	1.21	.00	1.21	
12404.	9.72	1.52	1.20	1.20	.01	1.20	1.21	1.22	1.23	1.22	.00	1.22	
12438.	9.75	1.50	1.21	1.21	.00	1.21	1.20	1.23	1.24	1.23	.00	1.22	
12500.	9.77	1.50	1.21	1.21	.01	1.21	1.21	1.23	1.24	1.23	.00	1.23	
		.86											
12084.	12.44	.60	1.56	1.54	.00	1.56	1.55	1.56	1.56	1.55	.00	1.54	END OF
12114.	12.44	.59	1.56	1.54	.00	1.56	1.55	1.55	1.56	1.55	.00	1.54	CHARGE
12153.	12.36	.58	1.56	1.54	.01	1.56	1.55	1.51	1.55	1.54	.00	1.54	
12221.	12.37	.58	1.56	1.54	.00	1.56	1.54	1.52	1.55	1.54	.00	1.54	
12290.	12.34	.57	1.56	1.54	.00	1.56	1.54	1.49	1.55	1.54	.00	1.54	
12322.	12.35	.57	1.56	1.54	.00	1.56	1.53	1.53	1.55	1.54	.00	1.54	
12355.	12.34	.53	1.55	1.54	.00	1.55	1.52	1.54	1.54	1.53	.00	1.53	
12404.	12.53	.48	1.54	1.56	.00	1.55	1.52	1.65	1.56	1.55	.00	1.58	
12438.	12.52	.50	1.55	1.55	.00	1.56	1.53	1.65	1.56	1.56	.00	1.55	
12500.	12.50	.52	1.56	1.55	.01	1.55	1.53	1.64	1.56	1.55	.00	1.55	

18

PACK NO. 50 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
12076.	10.24	2.51	1.06	1.17	1.12	1.08	.00	1.16	1.17	1.17	1.17	1.16	END OF
12105.	10.27	2.50	1.06	1.17	1.13	1.07	.00	1.17	1.17	1.17	1.17	1.16	DISCHARGE
12183.	10.34	2.49	1.07	1.18	1.12	1.08	.00	1.18	1.18	1.17	1.18	1.17	
12212.	10.35	2.48	1.08	1.19	1.13	1.09	.00	1.18	1.18	1.18	1.18	1.17	
12281.	10.30	2.50	1.07	1.18	1.11	1.08	.00	1.18	1.18	1.17	1.18	1.17	
12313.	10.23	2.50	1.05	1.17	1.09	1.07	.00	1.17	1.17	1.16	1.17	1.16	
12347.	10.13	2.49	1.04	1.17	1.03	1.06	.00	1.16	1.17	1.16	1.17	1.15	
12395.	10.56	2.52	1.11	1.19	1.16	1.11	.00	1.19	1.20	1.19	1.19	1.19	
12429.	10.47	2.53	1.09	1.18	1.16	1.10	.00	1.19	1.19	1.19	1.19	1.18	
12491.	10.48	2.52	1.09	1.19	1.16	1.10	.00	1.19	1.19	1.19	1.19	1.18	
		1.44											
12076.	13.81	.62	1.54	1.47	1.56	1.53	.00	1.49	1.47	1.58	1.49	1.65	END OF
12105.	13.86	.66	1.54	1.47	1.54	1.53	.00	1.50	1.47	1.56	1.49	1.66	CHARGE
12183.	13.91	.67	1.55	1.50	1.51	1.53	.00	1.55	1.48	1.56	1.49	1.67	
12212.	13.92	.65	1.54	1.50	1.52	1.53	.00	1.56	1.49	1.57	1.50	1.68	
12281.	13.88	.66	1.54	1.49	1.50	1.53	.00	1.55	1.49	1.56	1.49	1.67	
12313.	13.88	.69	1.55	1.49	1.50	1.54	.00	1.55	1.49	1.56	1.49	1.67	
12347.	13.67	.62	1.53	1.47	1.47	1.52	.00	1.52	1.46	1.53	1.47	1.64	
12395.	14.00	.61	1.56	1.49	1.56	1.55	.00	1.57	1.49	1.58	1.50	1.65	
12429.	14.01	.65	1.55	1.50	1.56	1.54	.00	1.57	1.49	1.58	1.50	1.66	
12491.	13.97	.67	1.55	1.50	1.54	1.54	.00	1.57	1.49	1.58	1.50	1.67	

PACK NO. 53 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
		1.50											
6005.	12.18	1.51	1.19	1.21	1.22	1.23	1.24	1.22	1.22	1.21	1.21	1.19	END OF DISCHARGE
6061.	12.19	1.50	1.20	1.21	1.23	1.23	1.24	1.23	1.23	1.21	1.22	1.19	
6104.	12.17	1.52	1.20	1.21	1.22	1.23	1.23	1.22	1.22	1.21	1.22	1.20	
6197.	12.26	1.50	1.20	1.22	1.24	1.24	1.24	1.23	1.23	1.22	1.23	1.20	
		.35											
6005.	15.88	.23	1.52	1.60	1.60	1.63	1.60	1.52	1.64	1.67	1.56	1.47	END OF CHARGE
6061.	15.63	.22	1.51	1.55	1.58	1.63	1.58	1.51	1.62	1.66	1.54	1.40	
6104.	15.88	.26	1.54	1.59	1.60	1.64	1.59	1.52	1.64	1.67	1.55	1.50	
6197.	15.80	.20	1.50	1.54	1.61	1.64	1.60	1.52	1.66	1.67	1.61	1.40	

PACK NO. 54 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
5948.	11.44	2.52	1.17	1.15	.91	1.14	1.20	1.18	1.16	1.17	1.19	1.18	END OF
5986.	11.45	2.53	1.17	1.15	.90	1.14	1.20	1.18	1.16	1.17	1.18	1.18	DISCHARGE
6043.	11.51	2.50	1.17	1.15	.91	1.15	1.21	1.19	1.17	1.18	1.19	1.18	
6087.	11.45	2.55	1.17	1.14	.89	1.14	1.19	1.18	1.16	1.17	1.18	1.18	
		.58											
5948.	15.46	.31	1.50	1.51	1.58	1.51	1.52	1.57	1.63	1.62	1.51	1.49	END OF
5986.	15.65	.36	1.51	1.52	1.60	1.52	1.55	1.60	1.65	1.63	1.52	1.51	CHARGE
6043.	15.57	.35	1.50	1.51	1.58	1.51	1.54	1.57	1.65	1.65	1.51	1.50	
6087.	15.59	.34	1.51	1.51	1.61	1.52	1.53	1.57	1.64	1.62	1.52	1.50	

48

PACK NO. 5 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
5849.	9.30	2.52	1.16	.00	.00	1.17	1.18	1.16	1.17	1.16	1.16	1.15	END OF DISCHARGE
5905.	9.33	2.52	1.16	.00	.00	1.17	1.17	1.16	1.17	1.16	1.16	1.16	
5948.	9.29	2.51	1.15	.00	.00	1.17	1.17	1.16	1.17	1.15	1.16	1.16	
6041.	9.41	2.50	1.16	.00	.00	1.18	1.18	1.18	1.18	1.17	1.18	1.17	
		.62											
5849.	11.51	.63	1.43	.00	.00	1.44	1.45	1.44	1.43	1.42	1.43	1.42	END OF CHARGE
5905.	11.55	.64	1.43	.00	.00	1.44	1.45	1.44	1.43	1.43	1.43	1.43	
5948.	11.56	.63	1.44	.00	.00	1.44	1.47	1.45	1.44	1.43	1.44	1.43	
6041.	11.53	.63	1.43	.00	.00	1.44	1.44	1.44	1.43	1.43	1.44	1.43	

PACK NO. 29 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
SONOTONE 5 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
5672.	5.77	1.50	.00	1.20	1.22	1.22	.00	1.00	.00	.00	.00	1.16	END OF
5700.	5.53	1.51	.00	1.16	1.20	1.19	.00	.87	.00	.00	.00	1.15	DISCHARGE
5744.	5.53	1.53	.00	1.17	1.19	1.18	.00	.86	.00	.00	.00	1.14	
		.48											
5672.	7.05	.46	.00	1.40	1.41	1.42	.00	1.42	.00	.00	.00	1.41	END OF
5700.	7.00	.49	.00	1.40	1.40	1.41	.00	1.41	.00	.00	.00	1.41	CHARGE
5744.	7.00	.48	.00	1.40	1.39	1.40	.00	1.40	.00	.00	.00	1.41	

PACK NO. 62 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 6 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
11775.	6.94	2.98	1.19	1.17	1.16	.00	.00	1.14	.00	1.16	1.16	.00	END OF
11804.	6.93	2.98	1.19	1.17	1.16	.00	.00	1.14	.00	1.16	1.16	.00	DISCHARGE
11882.	6.89	3.02	1.18	1.17	1.15	.00	.00	1.13	.00	1.15	1.14	.00	
11911.	6.91	3.01	1.19	1.17	1.15	.00	.00	1.14	.00	1.16	1.15	.00	
11980.	6.88	3.01	1.18	1.16	1.15	.00	.00	1.13	.00	1.15	1.13	.00	
12012.	6.79	3.05	1.18	1.15	1.13	.00	.00	1.12	.00	1.14	1.10	.00	
12046.	6.82	3.04	1.18	1.16	1.13	.00	.00	1.12	.00	1.15	1.10	.00	
12094.	7.04	3.03	1.20	1.18	1.16	.00	.00	1.15	.00	1.17	1.20	.00	
12128.	6.95	3.04	1.19	1.16	1.14	.00	.00	1.14	.00	1.16	1.18	.00	
12190.	7.00	3.02	1.20	1.18	1.16	.00	.00	1.15	.00	1.17	1.18	.00	
		1.72											
11775.	9.26	.61	1.54	1.58	1.56	.00	.00	1.59	.00	1.53	1.47	.00	END OF
11804.	9.23	.60	1.53	1.57	1.56	.00	.00	1.59	.00	1.53	1.46	.00	CHARGE
11882.	9.29	.65	1.54	1.61	1.56	.00	.00	1.60	.00	1.54	1.46	.00	
11911.	9.24	.61	1.54	1.59	1.56	.00	.00	1.59	.00	1.53	1.46	.00	
11980.	9.21	.61	1.54	1.57	1.55	.00	.00	1.58	.00	1.53	1.46	.00	
12012.	9.24	.69	1.54	1.58	1.56	.00	.00	1.58	.00	1.53	1.44	.00	
12046.	9.26	.62	1.53	1.60	1.55	.00	.00	1.61	.00	1.53	1.44	.00	
12094.	9.47	.79	1.54	1.61	1.57	.00	.00	1.67	.00	1.54	1.52	.00	
12128.	9.27	.72	1.54	1.56	1.56	.00	.00	1.57	.00	1.54	1.50	.00	
12190.	9.25	.70	1.54	1.56	1.57	.00	.00	1.58	.00	1.54	1.48	.00	

PACK NO. 65
GULTON 6 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 1.80	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
5918.	9.78	1.82	1.23	1.24	1.23	.00	1.26	.00	1.19	1.23	1.24	1.16	END OF DISCHARGE
5974.	9.20	1.81	1.21	1.21	1.21	.00	1.21	.00	1.16	.87	1.22	1.11	
6017.	9.69	1.80	1.23	1.23	1.23	.00	1.25	.00	1.19	1.16	1.24	1.14	
6110.	9.72	1.81	1.23	1.24	1.24	.00	1.24	.00	1.19	1.21	1.24	1.14	
		.41											
5918.	12.53	.35	1.57	1.61	1.53	.00	1.54	.00	1.64	1.48	1.51	1.60	END OF CHARGE
5974.	11.57	.41	1.46	1.46	1.48	.00	1.37	.00	1.46	1.32	1.47	1.50	
6017.	12.64	.39	1.60	1.66	1.57	.00	1.55	.00	1.66	1.37	1.53	1.66	
6110.	12.77	.40	1.64	1.66	1.59	.00	1.52	.00	1.68	1.40	1.55	1.71	

88

PACK NO. 110 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
G.E. 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES 1	2	3	4	5	
11866.	6.13	3.61	1.24	1.23	1.21	1.23	1.22	END OF
11896.	6.14	3.61	1.23	1.23	1.23	1.23	1.22	DISCHARGE
11935.	6.14	3.59	1.22	1.22	1.23	1.23	1.22	
12003.	6.12	3.59	1.23	1.23	1.24	1.24	1.24	
12072.	6.13	3.58	1.21	1.22	1.22	1.23	1.24	
12104.	6.12	3.59	1.22	1.22	1.22	1.23	1.22	
12137.	6.10	3.59	1.21	1.23	1.24	1.22	1.20	
12186.	6.18	3.60	1.24	1.22	1.24	1.22	1.24	
12220.	6.14	3.59	1.23	1.22	1.24	1.23	1.22	
12282.	6.14	3.59	1.23	1.22	1.23	1.23	1.23	
		2.07						
11866.	7.72	1.61	1.58	1.63	1.43	1.60	1.46	END OF
11896.	7.77	1.62	1.56	1.63	1.48	1.60	1.47	CHARGE
11935.	7.74	1.63	1.54	1.63	1.48	1.60	1.46	
12003.	7.71	1.63	1.53	1.63	1.48	1.60	1.50	
12072.	7.71	1.59	1.47	1.63	1.46	1.60	1.53	
12104.	7.70	1.58	1.53	1.62	1.46	1.59	1.48	
12137.	7.71	1.49	1.53	1.62	1.49	1.59	1.44	
12186.	7.81	1.19	1.53	1.62	1.53	1.60	1.50	
12220.	7.74	1.44	1.50	1.63	1.53	1.61	1.45	
12282.	7.71	1.46	1.48	1.64	1.49	1.61	1.49	

PACK NO. 124 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
11633.	5.79	5.95	1.19	1.19	1.08	1.19	1.18	END OF DISCHARGE
11663.	5.77	6.01	1.18	1.18	1.07	1.19	1.18	
11702.	5.75	6.02	1.18	1.19	1.05	1.18	1.18	
11770.	5.73	6.00	1.18	1.18	1.03	1.18	1.16	
11839.	5.69	6.00	1.18	1.18	1.03	1.18	1.17	
11871.	5.68	6.02	1.17	1.17	1.02	1.18	1.16	
11904.	5.66	6.01	1.17	1.17	1.01	1.18	1.15	
11987.	5.85	6.00	1.20	1.20	1.09	1.21	1.19	
12049.	5.82	5.98	1.19	1.20	1.08	1.20	1.18	
		3.45						
11633.	7.80	1.23	1.56	1.51	1.65	1.49	1.61	END OF CHARGE
11663.	7.74	1.16	1.55	1.50	1.63	1.49	1.59	
11702.	7.94	1.37	1.59	1.53	1.68	1.50	1.66	
11770.	7.64	1.23	1.54	1.48	1.57	1.47	1.56	
11839.	7.59	1.24	1.53	1.48	1.58	1.47	1.55	
11871.	7.59	1.26	1.53	1.48	1.58	1.47	1.54	
11904.	7.58	1.26	1.53	1.48	1.58	1.47	1.53	
11987.	7.91	1.32	1.59	1.55	1.66	1.54	1.59	
12049.	7.77	1.23	1.57	1.51	1.63	1.50	1.60	

96

PACK NO. 111
G.E. 12 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES 1	2	3	4	5	
5927.	6.16	3.60	1.24	1.24	1.24	1.24	1.24	END OF DISCHARGE
5965.	6.16	3.61	1.24	1.23	1.23	1.24	1.23	
6022.	6.14	3.61	1.23	1.23	1.23	1.24	1.23	
6066.	6.14	3.63	1.23	1.23	1.22	1.23	1.23	
		.83						
5927.	7.79	.44	1.60	1.56	1.56	1.52	1.58	END OF CHARGE
5965.	7.82	.42	1.61	1.55	1.55	1.51	1.58	
6022.	7.80	.41	1.61	1.55	1.54	1.51	1.58	
6066.	7.81	.38	1.61	1.54	1.54	1.50	1.59	

16

PACK NO. 125 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
5920.	5.97	5.98	1.19	1.20	1.19	1.20	1.20	END OF DISCHARGE
5958.	5.93	6.06	1.19	1.20	1.19	1.20	1.20	
6015.	5.94	5.99	1.19	1.19	1.20	1.20	1.20	
6059.	5.92	6.02	1.19	1.19	1.19	1.20	1.19	
		1.38						
5920.	7.79	.50	1.59	1.57	1.59	1.52	1.51	END OF CHARGE
5958.	7.77	.45	1.60	1.58	1.60	1.51	1.51	
6015.	7.77	.43	1.60	1.57	1.61	1.52	1.51	
6059.	7.77	.40	1.60	1.56	1.61	1.52	1.49	

PACK NO. 83 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
G.E. 12 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
5933.	5.70	6.03	1.14	1.14	1.14	1.15	1.13	END OF DISCHARGE
5971.	5.65	6.04	1.13	1.14	1.14	1.14	1.13	
6028.	5.70	5.98	1.14	1.14	1.15	1.15	1.14	
6072.	5.65	5.99	1.13	1.14	1.14	1.14	1.12	
		1.50						
5933.	7.22	1.50	1.44	1.44	1.45	1.45	1.43	END OF CHARGE
5971.	7.19	1.52	1.45	1.44	1.45	1.45	1.43	
6028.	7.21	1.52	1.45	1.44	1.46	1.45	1.44	
6072.	7.17	1.52	1.45	1.43	1.45	1.44	1.42	

PACK NO. 86 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
G.E. 12 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES 1	2	3	4	5	
5738.	5.69	3.56	1.15	1.14	1.15	1.15	1.14	END OF
5776.	5.70	3.66	1.16	1.14	1.14	1.14	1.13	DISCHARGE
5833.	5.65	3.61	1.15	1.12	1.12	1.13	1.12	
5877.	5.65	3.64	1.14	1.12	1.12	1.13	1.12	
		1.15						
5738.	7.11	1.15	1.42	1.42	1.44	1.43	1.42	END OF
5776.	7.11	1.16	1.42	1.42	1.43	1.42	1.41	CHARGE
5833.	7.10	1.13	1.42	1.41	1.43	1.42	1.41	
5877.	7.10	1.12	1.42	1.41	1.42	1.42	1.41	

84

PACK NO. 84
GOULD 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	
11815.	6.02	5.91	1.23	1.23	1.22	1.23	1.15	END OF
11844.	5.99	5.98	1.23	1.22	1.22	1.22	1.14	DISCHARGE
11922.	5.99	5.99	1.22	1.23	1.22	1.22	1.14	
11951.	6.11	5.98	1.23	1.24	1.23	1.23	1.21	
12020.	6.12	5.96	1.23	1.23	1.22	1.23	1.25	
12052.	6.09	5.98	1.22	1.22	1.22	1.22	1.24	
12134.	6.00	6.00	1.20	1.21	1.19	1.20	1.23	
12230.	6.15	5.95	1.24	1.24	1.24	1.24	1.23	
		3.45						
11815.	7.64	2.34	1.53	1.57	1.56	1.55	1.45	END OF
11844.	7.63	2.35	1.53	1.56	1.55	1.54	1.45	CHARGE
11922.	7.74	2.72	1.55	1.61	1.57	1.56	1.48	
11951.	7.75	2.46	1.55	1.58	1.58	1.56	1.50	
12020.	7.73	2.44	1.54	1.57	1.57	1.56	1.51	
12052.	7.71	2.49	1.54	1.57	1.57	1.55	1.50	
12134.	7.84	2.68	1.60	1.60	1.57	1.55	1.54	
12230.	7.88	2.63	1.59	1.59	1.62	1.57	1.53	

PACK NO. 80 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GOULD 20 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
5935.	6.09	6.03	1.24	1.22	1.18	1.25	1.24	END OF
5991.	6.08	5.96	1.24	1.21	1.18	1.24	1.23	DISCHARGE
6103.	6.16	6.05	1.26	1.23	1.20	1.26	1.25	
		1.38						
5935.	7.68	1.23	1.53	1.57	1.54	1.54	1.53	END OF
5991.	7.63	1.07	1.52	1.55	1.55	1.53	1.51	CHARGE
6103.	7.80	1.19	1.53	1.58	1.60	1.57	1.56	

96

PACK NO. 94
GOULD 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	CELL VOLTAGES 1	2	3	4	5	
5795.	5.95	10.03	1.22	1.20	1.16	1.20	1.19	END OF DISCHARGE
5851.	5.87	10.07	1.21	1.19	1.14	1.19	1.17	
5894.	5.85	10.07	1.20	1.18	1.13	1.18	1.16	
5987.	5.85	10.09	1.21	1.19	1.12	1.19	1.17	
		2.30						
5795.	7.70	1.15	1.52	1.52	1.56	1.56	1.51	END OF CHARGE
5851.	7.65	1.14	1.50	1.49	1.59	1.56	1.50	
5894.	7.66	1.10	1.49	1.48	1.60	1.56	1.51	
5987.	7.65	1.10	1.50	1.48	1.59	1.57	1.51	

PACK NO. 105 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GOULD 20 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	CELL VOLTAGES 1	2	3	4	5	
5594.	3.18	9.71	.00	1.15	.01	.88	1.16	END OF
5651.	3.09	9.98	.00	1.14	.00	.82	1.14	DISCHARGE
5751.	2.23	10.04	.00	1.14	.00	.06	1.16	
		2.50						
5594.	4.38	2.48	.00	1.49	.00	1.43	1.47	END OF
5651.	4.37	2.42	.00	1.49	.00	1.44	1.46	CHARGE
5751.	4.25	2.52	.00	1.48	.00	1.35	1.44	

86

PACK NO. 102
GULTON 20 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
5763.	4.83	6.00	1.21	.00	1.20	1.24	1.22	END OF
5819.	4.84	5.93	1.21	.00	1.21	1.24	1.22	DISCHARGE
5931.	4.86	6.00	1.21	.00	1.22	1.25	1.22	
		1.38						
5763.	6.16	1.19	1.55	.00	1.55	1.52	1.55	END OF
5819.	6.15	1.21	1.55	.00	1.55	1.52	1.55	CHARGE
5931.	6.27	1.37	1.60	.00	1.60	1.53	1.57	

PACK NO. 116
SOLTON 20 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 10.00	CELL VOLTAGES 1	2	3	4	5	
5583.	5.74	9.85	1.13	1.17	1.10	1.19	1.16	END OF DISCHARGE
5639.	5.78	9.84	1.15	1.18	1.11	1.19	1.16	
5682.	5.74	9.79	1.14	1.18	1.11	1.19	1.16	
5775.	5.73	9.95	1.14	1.17	1.10	1.18	1.15	
		2.30						
5583.	7.97	1.72	1.44	1.70	1.57	1.68	1.56	END OF CHARGE
5639.	7.85	2.09	1.43	1.63	1.57	1.65	1.56	
5682.	7.88	1.91	1.44	1.69	1.58	1.65	1.56	
5775.	7.82	1.62	1.45	1.63	1.56	1.62	1.55	

001

PACK NO. 77 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
GULTON 20 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 3 HOURS

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
5673.	4.54	5.61	1.14	.00	1.16	1.19	1.12	END OF DISCHARGE
5711.	3.36	5.98	.00	.00	1.14	1.17	1.11	
5734.	3.49	6.04	.00	.00	1.1[illegible]	1.20	1.18	
5778.	3.34	6.06	.00	.00	1.15	1.16	1.12	
		1.92						
5673.	4.51	1.92	1.47	.00	1.48	1.45	1.43	END OF CHARGE
5711.	4.35	1.78	.00	.00	1.47	1.44	1.42	
5734.	4.35	1.86	.00	.00	1.48	1.44	1.42	
5778.	4.34	1.88	.00	.00	1.47	1.45	1.42	

101

PACK NO. 103 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 110 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
4761.	6.14	1.52	1.23	1.23	1.24	1.23	1.25	END OF
4790.	6.14	1.50	1.23	1.23	1.24	1.23	1.25	DISCHARGE
4868.	6.14	1.50	1.23	1.23	1.24	1.22	1.25	
4897.	6.14	1.49	1.23	1.24	1.25	1.23	1.25	
4966.	6.13	1.49	1.23	1.22	1.24	1.22	1.25	
4998.	6.11	1.49	1.23	1.22	1.24	1.22	1.23	
5032.	6.11	1.48	1.23	1.22	1.24	1.22	1.24	
5080.	6.18	1.51	1.24	1.23	1.24	1.24	1.25	
5114.	6.15	1.52	1.23	1.23	1.25	1.24	1.24	
5176.	6.17	1.51	1.24	1.23	1.25	1.24	1.24	
		.83						
4761.	7.43	.46	1.50	1.49	1.55	1.43	1.49	END OF
4790.	7.42	.46	1.50	1.48	1.54	1.42	1.50	CHARGE
4868.	7.43	.47	1.50	1.50	1.55	1.41	1.51	
4897.	7.43	.46	1.50	1.49	1.55	1.41	1.50	
4966.	7.41	.47	1.50	1.47	1.55	1.41	1.50	
4998.	7.41	.49	1.50	1.47	1.56	1.41	1.49	
5032.	7.40	.47	1.51	1.46	1.56	1.41	1.50	
5080.	7.41	.43	1.51	1.46	1.54	1.43	1.50	
5114.	7.43	.46	1.52	1.45	1.57	1.42	1.49	
5176.	7.39	.48	1.51	1.43	1.56	1.42	1.50	

PACK NO. 107 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 5 A.H. NIMBJS PERCENT OF RECHARGE 110 ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4115.	5.98	2.48	1.20	1.20	1.21	1.20	1.21	73.709	END OF
4144.	5.97	2.47	1.20	1.20	1.21	1.20	1.21	68.479	DISCHARGE
4222.	5.97	2.48	1.20	1.20	1.21	1.20	1.21	60.414	
4251.	5.96	2.47	1.20	1.20	1.20	1.20	1.21	56.895	
4320.	5.97	2.47	1.20	1.19	1.20	1.20	1.22	51.874	
4357.	5.95	2.47	1.19	1.19	1.20	1.20	1.20	48.840	
4396.	5.93	2.50	1.19	1.18	1.20	1.20	1.19	45.702	
4434.	6.01	2.46	1.21	1.20	1.21	1.21	1.21	41.974	
4467.	5.96	2.44	1.19	1.19	1.20	1.20	1.20	39.188	
4530.	5.97	2.44	1.19	1.20	1.21	1.20	1.20	35.295	
		1.38							
4115.	7.42	.69	1.50	1.49	1.49	1.46	1.52	74.603	END OF
4144.	7.42	.69	1.50	1.49	1.49	1.46	1.52	69.287	CHARGE
4222.	7.43	.69	1.50	1.49	1.49	1.48	1.51	61.289	
4251.	7.42	.70	1.50	1.49	1.48	1.48	1.51	57.808	
4320.	7.41	.71	1.50	1.48	1.48	1.48	1.52	53.148	
4357.	7.44	.69	1.51	1.48	1.49	1.49	1.50	49.867	
4396.	7.41	.71	1.50	1.48	1.49	1.48	1.50	46.596	
4434.	7.43	.64	1.50	1.48	1.48	1.49	1.50	43.001	
4467.	7.32	.68	1.48	1.46	1.47	1.47	1.48	39.934	
4530.	7.31	.69	1.48	1.45	1.47	1.47	1.48	35.907	

PACK NO. 106 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 25 C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 120 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
4781.	6.07	1.46	1.21	1.22	1.23	1.23	1.23	END OF DISCHARGE
4811.	6.07	1.46	1.21	1.22	1.23	1.23	1.23	
4888.	6.04	1.47	1.20	1.22	1.21	1.22	1.23	
4918.	6.04	1.48	1.20	1.22	1.22	1.22	1.23	
4987.	6.02	1.49	1.20	1.21	1.22	1.22	1.23	
5019.	6.04	1.49	1.20	1.20	1.20	1.21	1.21	
5052.	6.06	1.48	1.20	1.21	1.21	1.21	1.22	
5101.	6.09	1.49	1.23	1.22	1.23	1.23	1.23	
5134.	6.09	1.48	1.22	1.22	1.24	1.23	1.22	
		.90						
4781.	7.14	.90	1.43	1.44	1.43	1.44	1.44	END OF CHARGE
4811.	7.14	.90	1.43	1.43	1.42	1.44	1.44	
4888.	7.09	.90	1.42	1.43	1.41	1.43	1.43	
4918.	7.14	.89	1.43	1.44	1.42	1.44	1.44	
4987.	7.12	.90	1.42	1.43	1.42	1.43	1.44	
5019.	7.11	.90	1.42	1.43	1.41	1.43	1.42	
5052.	7.14	.90	1.42	1.43	1.41	1.43	1.43	
5101.	7.13	.90	1.43	1.43	1.42	1.44	1.43	
5134.	7.12	.90	1.43	1.43	1.43	1.43	1.42	

PACK NO. 304 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 120 ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4085.	5.51	2.44	1.14	1.14	1.15	.98	1.14	11.609	END OF
4114.	5.51	2.44	1.14	1.13	1.15	.99	1.15	11.620	DISCHARGE
4192.	5.48	2.44	1.14	1.13	1.15	.95	1.14	11.641	
4221.	5.56	2.43	1.15	1.14	1.15	1.01	1.14	11.927	
4290.	5.50	2.43	1.14	1.13	1.15	.99	1.14	11.578	
4321.	5.54	2.44	1.14	1.13	1.15	1.02	1.13	11.631	
4366.	5.54	2.44	1.14	1.13	1.15	1.03	1.13	11.609	
4404.	5.72	2.45	1.15	1.14	1.15	1.17	1.15	13.893	
4437.	5.68	2.44	1.14	1.13	1.15	1.15	1.13	13.787	
4500.	5.70	2.44	1.15	1.14	1.16	1.14	1.14	12.709	
		1.50							
4085.	7.31	1.50	1.47	1.47	1.50	1.44	1.47	12.212	END OF
4114.	7.30	1.50	1.47	1.46	1.50	1.44	1.48	12.233	CHARGE
4192.	7.34	1.52	1.47	1.47	1.52	1.45	1.48	12.233	
4221.	7.34	1.51	1.48	1.47	1.51	1.45	1.48	12.592	
4290.	7.30	1.51	1.47	1.46	1.50	1.44	1.48	12.170	
4321.	7.30	1.51	1.46	1.46	1.50	1.44	1.46	12.434	
4366.	7.30	1.51	1.47	1.46	1.50	1.44	1.46	12.444	
4404.	7.31	1.51	1.46	1.46	1.50	1.45	1.46	20.594	
4437.	7.31	1.52	1.46	1.46	1.50	1.46	1.46	20.361	
4500.	7.32	1.51	1.47	1.46	1.52	1.45	1.46	16.303	

105

PACK NO. 113 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 130 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	
4783.	5.81	1.49	1.17	1.18	1.15	1.18	1.14	END OF
4813.	5.82	1.48	1.17	1.19	1.17	1.18	1.16	DISCHARGE
4890.	5.84	1.47	1.17	1.18	1.15	1.18	1.15	
4920.	5.83	1.47	1.17	1.19	1.15	1.18	1.14	
4989.	5.77	1.50	1.16	1.17	1.14	1.17	1.12	
		.98						
4783.	7.11	.99	1.43	1.42	1.41	1.42	1.41	END OF
4813.	7.09	.99	1.43	1.43	1.42	1.43	1.42	CHARGE
4890.	7.12	.98	1.42	1.42	1.41	1.42	1.41	
4920.	7.12	.99	1.43	1.42	1.42	1.42	1.41	
4989.	7.11	.97	1.42	1.42	1.41	1.42	1.40	

PACK NO. 114 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
G.E. 5 A.H. NIMBUS PERCENT OF RECHARGE 130 ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4054.	5.38	2.45	1.07	1.13	1.09	1.11	1.03	35.249	END OF
4083.	5.43	2.44	1.08	1.13	1.10	1.11	1.06	35.077	DISCHARGE
4161.	5.44	2.44	1.08	1.12	1.08	1.12	1.09	35.719	
4190.	5.39	2.44	1.08	1.12	1.07	1.11	1.04	35.794	
4259.	5.37	2.45	1.05	1.12	1.06	1.11	1.07	36.394	
4290.	5.36	2.46	1.06	1.12	1.06	1.11	1.03	36.490	
4335.	5.41	2.46	1.09	1.12	1.08	1.11	1.04	36.875	
4373.	5.38	2.48	1.07	1.11	1.06	1.07	1.09	37.068	
4406.	5.48	2.48	1.11	1.11	1.07	1.11	1.11	37.496	
4469.	5.55	2.44	1.10	1.13	1.13	1.12	1.11	38.031	
		1.63							
4054.	7.22	1.65	1.44	1.47	1.45	1.45	1.45	39.636	END OF
4083.	7.22	1.63	1.45	1.47	1.45	1.45	1.45	39.464	CHARGE
4161.	7.23	1.62	1.45	1.47	1.45	1.45	1.46	39.732	
4190.	7.24	1.65	1.45	1.47	1.45	1.45	1.45	39.892	
4259.	7.22	1.65	1.44	1.47	1.45	1.45	1.46	40.385	
4290.	7.23	1.66	1.44	1.47	1.45	1.45	1.44	40.278	
4335.	7.24	1.66	1.45	1.47	1.45	1.45	1.45	40.556	
4373.	7.24	1.67	1.45	1.48	1.45	1.44	1.46	39.250	
4406.	7.24	1.66	1.45	1.47	1.45	1.45	1.45	40.631	
4469.	7.25	1.66	1.45	1.48	1.46	1.45	1.45	41.818	

107

PACK NO. 117 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 110 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
4555.	6.17	1.50	1.24	1.23	1.23	1.24	1.23	END OF
4584.	6.12	1.49	1.23	1.22	1.22	1.23	1.22	DISCHARGE
4662.	6.26	1.50	1.26	1.25	1.25	1.25	1.25	
4691.	6.25	1.50	1.26	1.24	1.24	1.25	1.25	
4760.	6.21	1.50	1.25	1.24	1.23	1.25	1.24	
4792.	6.19	1.50	1.25	1.23	1.23	1.24	1.23	
4826.	6.18	1.50	1.24	1.23	1.23	1.24	1.23	
4874.	6.18	1.51	1.24	1.23	1.23	1.24	1.23	
4908.	6.16	1.51	1.24	1.23	1.23	1.24	1.23	
4970.	6.18	1.49	1.25	1.23	1.23	1.24	1.23	
		.83						
4555.	7.82	.83	1.59	1.54	1.62	1.54	1.53	END OF
4584.	7.78	.83	1.58	1.53	1.62	1.53	1.52	CHARGE
4662.	7.20	.79	1.43	1.44	1.43	1.44	1.43	
4691.	7.23	.62	1.45	1.45	1.44	1.44	1.44	
4760.	7.23	.54	1.45	1.45	1.44	1.44	1.44	
4792.	7.24	.55	1.45	1.45	1.45	1.44	1.44	
4826.	7.22	.54	1.45	1.44	1.44	1.44	1.44	
4874.	7.41	.50	1.49	1.47	1.51	1.46	1.47	
4908.	7.43	.51	1.49	1.47	1.52	1.47	1.47	
4970.	7.41	.50	1.49	1.47	1.51	1.47	1.47	

PACK NO. 121 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 110 ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4117.	5.99	2.50	1.21	1.20	1.21	1.21	1.21	14.786	END OF
4146.	5.93	2.47	1.20	1.19	1.20	1.20	1.20	12.385	DISCHARGE
4224.	5.92	2.47	1.19	1.19	1.19	1.20	1.20	-.425	
4253.	5.91	2.47	1.19	1.19	1.19	1.20	1.19	.113	
4353.	5.89	2.47	1.18	1.18	1.19	1.19	1.18	12.631	
4398.	5.88	2.47	1.18	1.18	1.18	1.19	1.18	12.666	
4436.	5.93	2.49	1.19	1.19	1.19	1.20	1.20	12.432	
4469.	5.91	2.48	1.18	1.18	1.19	1.19	1.19	12.362	
4532.	6.29	2.49	1.26	1.26	1.27	1.27	1.26	12.502	
		1.38							
4117.	7.85	1.38	1.60	1.57	1.60	1.55	1.59	18.638	END OF
4146.	7.44	.78	1.49	1.49	1.52	1.48	1.51	12.888	CHARGE
4224.	7.44	.76	1.48	1.50	1.52	1.49	1.51	-.753	
4253.	7.44	.76	1.47	1.50	1.52	1.49	1.50	-.331	
4353.	7.45	.77	1.47	1.50	1.52	1.49	1.50	13.146	
4398.	7.44	.75	1.47	1.49	1.52	1.49	1.50	13.181	
4436.	7.46	.78	1.46	1.50	1.52	1.49	1.51	12.970	
4469.	7.43	.77	1.46	1.49	1.52	1.49	1.50	12.807	
4532.	7.41	.77	1.46	1.49	1.52	1.49	1.50	12.678	

PACK NO. 120
GULTON 5 A.H. NIMBUS

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 120

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
4705.	5.80	1.49	1.23	.93	1.22	1.23	1.21	END OF DISCHARGE
4763.	5.96	1.50	1.24	1.03	1.23	1.24	1.21	
4793.	5.95	1.49	1.24	1.04	1.23	1.24	1.21	
4894.	5.92	1.51	1.23	1.04	1.23	1.24	1.22	
4976.	5.95	1.53	1.24	1.04	1.22	1.24	1.22	
5009.	5.95	1.51	1.24	1.04	1.22	1.24	1.22	
5072.	5.56	1.51	1.11	1.12	1.12	1.12	1.09	
8262.	5.92	1.50	1.23	1.04	1.22	1.23	1.21	
		.90						
4705.	7.38	.91	1.44	1.61	1.43	1.44	1.44	END OF CHARGE
4763.	7.27	.91	1.42	1.55	1.42	1.43	1.43	
4793.	7.32	.91	1.44	1.56	1.43	1.44	1.44	
4894.	7.28	.92	1.43	1.55	1.44	1.44	1.43	
4976.	7.32	.91	1.44	1.55	1.43	1.44	1.44	
5009.	7.29	.92	1.44	1.54	1.43	1.44	1.44	
5072.	7.89	.92	1.56	1.56	1.57	1.60	1.61	
8262.	7.29	.91	1.42	1.55	1.43	1.44	1.43	

011

PACK NO. 318 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 120 ORBIT PERIOD 90 MIN

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4085.	5.44	2.45	1.11	1.10	1.16	.99	1.11	11.959	END OF
4143.	5.58	2.44	1.13	1.12	1.18	1.06	1.13	10.419	DISCHARGE
4172.	5.57	2.45	1.14	1.12	1.16	1.06	1.12	10.932	
4241.	5.44	2.46	1.13	1.10	1.16	.97	1.12	11.516	
4272.	5.42	2.47	1.12	1.09	1.16	.96	1.11	11.516	
4317.	5.44	2.46	1.13	1.08	1.16	.99	1.11	11.306	
4355.	5.53	2.49	1.13	1.11	1.15	1.05	1.11	11.656	
4388.	5.30	2.48	1.08	1.05	1.14	.96	1.10	11.213	
4451.	5.58	2.44	1.14	1.12	1.16	1.06	1.12	11.586	
		1.50							
4085.	7.35	1.51	1.48	1.47	1.48	1.50	1.48	22.147	END OF
4143.	7.37	1.52	1.48	1.47	1.49	1.50	1.48	20.735	CHARGE
4172.	7.36	1.50	1.48	1.46	1.48	1.50	1.47	21.272	
4241.	7.34	1.51	1.48	1.46	1.48	1.50	1.48	21.377	
4272.	7.34	1.52	1.47	1.46	1.48	1.50	1.46	21.295	
4317.	7.35	1.51	1.48	1.46	1.48	1.50	1.46	21.062	
4355.	7.33	1.53	1.46	1.45	1.47	1.50	1.46	22.509	
4388.	7.34	1.49	1.47	1.45	1.48	1.50	1.46	19.510	
4451.	7.35	1.49	1.47	1.46	1.49	1.50	1.46	21.669	

PACK NO. 127 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 130 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
4704.	5.69	1.48	1.14	1.14	1.17	1.17	1.14	END OF DISCHARGE
4731.	5.79	1.45	1.16	1.15	1.16	1.18	1.16	
4808.	5.76	1.45	1.15	1.15	1.17	1.18	1.17	
4838.	5.77	1.45	1.15	1.15	1.17	1.18	1.16	
4907.	5.74	1.46	1.15	1.14	1.17	1.18	1.16	
4939.	5.76	1.46	1.15	1.14	1.17	1.18	1.14	
4972.	5.76	1.45	1.15	1.15	1.17	1.18	1.16	
5021.	5.69	1.49	1.13	1.12	1.15	1.16	1.13	
5054.	5.75	1.47	1.15	1.14	1.15	1.17	1.15	
5117.	5.80	1.46	1.16	1.15	1.16	1.18	1.16	
		.98						
4704.	7.10	.98	1.42	1.43	1.43	1.42	1.42	END OF CHARGE
4731.	7.14	.98	1.43	1.43	1.42	1.42	1.42	
4808.	7.13	.97	1.42	1.44	1.42	1.42	1.43	
4838.	7.14	.96	1.43	1.44	1.43	1.43	1.43	
4907.	7.13	.96	1.43	1.43	1.43	1.43	1.43	
4939.	7.15	.97	1.43	1.43	1.43	1.43	1.42	
4972.	7.13	1.00	1.43	1.44	1.43	1.43	1.43	
5021.	7.13	1.00	1.42	1.43	1.42	1.42	1.42	
5054.	7.14	1.00	1.43	1.43	1.42	1.42	1.42	
5117.	7.15	1.00	1.43	1.43	1.42	1.42	1.42	

211

PACK NO. 128 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
GULTON 5 A.H. NIMBUS PERCENT OF RECHARGE 130 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	PSIA	
4008.	4.22	2.38	1.12	.88	.00	1.15	1.09	25.346	END OF
4115.	4.39	2.46	1.12	1.08	.00	1.14	1.07	25.570	DISCHARGE
4184.	4.04	2.45	1.11	.75	.00	1.14	1.07	26.321	
4215.	3.93	2.45	1.11	.65	.00	1.14	1.05	26.377	
4260.	4.30	2.45	1.11	1.03	.00	1.13	1.05	26.355	
4298.	4.33	2.46	1.11	1.06	.00	1.13	1.06	26.702	
4331.	4.30	2.46	1.11	1.03	.00	1.13	1.05	26.758	
4394.	4.44	2.39	1.12	1.14	.00	1.15	1.06	27.554	
		1.63							
4008.	5.80	1.63	1.45	1.44	.00	1.44	1.50	31.534	END OF
4115.	5.84	1.65	1.45	1.46	.00	1.44	1.50	31.231	CHARGE
4184.	5.82	1.67	1.45	1.45	.00	1.44	1.51	32.778	
4215.	5.82	1.67	1.45	1.45	.00	1.44	1.49	32.397	
4260.	5.83	1.66	1.45	1.46	.00	1.44	1.50	31.769	
4298.	5.84	1.68	1.45	1.45	.00	1.44	1.50	32.901	
4331.	5.84	1.67	1.46	1.46	.00	1.44	1.50	32.632	
4394.	5.86	1.66	1.46	1.47	.00	1.45	1.50	34.134	

PACK NO. 59 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 6 A.H. 3RD ELECTRODE R 10 10 10 10 10 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5		
4614.	4.86	2.91	.169	.089	.004	.133	.115	1.22	1.22	.01	1.22	1.22	1.460	END OF
4673.	4.83	2.99	.154	.079	.004	.128	.111	1.21	1.21	.00	1.21	1.21	1.457	DISCHARGE
4830.	4.85	3.07	.157	.119	.002	.128	.158	1.23	1.23	.01	1.22	1.22	1.519	
4912.	4.89	2.99	.159	.106	.000	.118	.154	1.23	1.23	.01	1.23	1.23	1.504	
5010.	4.83	3.07	.154	.097	.003	.112	.141	1.22	1.22	.00	1.21	1.21	1.504	
4614.	5.82	.10	.127	.109	.003	.168	.135	1.46	1.47	.01	1.46	1.46		TRIP
4673.	6.07	.97	.108	.093	.002	.152	.129	1.50	1.55	.01	1.52	1.51		POINT
4830.	5.97	.27	.139	.133	.018	.169	.186	1.50	1.51	.03	1.52	1.52		
4912.	5.89	.16	.116	.118	.001	.150	.172	1.47	1.48	.01	1.48	1.48		
5010.	5.88	.13	.127	.115	.002	.153	.172	1.47	1.48	.01	1.49	1.48		
													AH IN	
4614.	5.67	.06	.147	.119	.004	.175	.147	1.42	1.42	.01	1.42	1.42	1.448	END OF
4673.	5.63	.05	.141	.117	.005	.169	.148	1.41	1.41	.01	1.41	1.41	1.434	CHARGE
4830.	5.72	.08	.146	.149	.001	.163	.181	1.44	1.44	.01	1.44	1.44	1.587	
4912.	5.67	.06	.145	.144	.001	.164	.189	1.43	1.43	.01	1.43	1.43	1.473	
5010.	5.67	.05	.139	.133	.004	.153	.180	1.43	1.42	.01	1.42	1.42	1.581	

PACK NO. 71 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 0 C
GULTON 6 A.H. 3RD ELECTRODE R 10 10 10 10 10 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5	AH IN	
4677.	4.71	4.85	.099	.043	.115	.075	.000	1.20	1.20	1.20	1.13	.00	2.425	END OF
4736.	4.64	4.80	.102	.053	.118	.065	.000	1.19	1.19	1.19	1.10	.00	2.402	DISCHARGE
4891.	4.57	4.85	.111	.078	.125	.038	.000	1.19	1.19	1.19	1.04	.00	2.433	
4971.	4.49	4.81	.001	.074	.110	.032	.000	1.18	1.18	1.18	.99	.00	2.433	
5069.	3.42	3.67	.093	.072	.103	.009	.000	1.19	1.20	1.20	.14	.00	2.082	
4677.	6.05	1.43	.084	.063	.117	.146	.000	1.51	1.51	1.51	1.55	.00		TRIP
4736.	6.33	2.82	.072	.057	.100	.147	.000	1.56	1.57	1.57	1.65	.00		POINT
4891.	6.23	2.21	.079	.074	.103	.149	.000	1.56	1.55	1.56	1.59	.00		
4971.	6.04	1.13	.117	.118	.137	.144	.000	1.52	1.51	1.51	1.53	.00		
5069.	5.87	.63	.119	.132	.142	.002	.000	1.52	1.51	1.50	1.38	.00		
4677.	5.72	.32	.128	.079	.143	.126	.000	1.43	1.44	1.43	1.44	.00	2.550	END OF
4736.	5.70	.20	.129	.087	.145	.116	.000	1.43	1.43	1.43	1.43	.00	2.528	CHARGE
4891.	5.57	.03	.137	.112	.153	.101	.000	1.41	1.41	1.40	1.39	.00	2.535	
4971.	5.55	.06	.137	.114	.145	.095	.000	1.40	1.40	1.40	1.38	.00	2.661	
5069.	5.45	.03	.137	.119	.150	.002	.000	1.40	1.40	1.39	1.30	.00	2.247	

511

PACK NO. 11 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C
GULTON 6 A.H. 3RD ELECTRODE R 24 24 10 8 24 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5		
5744.	4.40	4.71	.112	.279	.000	.184	.348	1.08	1.09	.00	1.16	1.10	2.387	END OF
5805.	4.40	4.68	.045	.246	.000	.183	.347	1.07	1.09	.00	1.16	1.11	2.364	DISCHARGE
5909.	4.22	4.71	.014	.064	.000	.219	.310	1.06	1.03	.00	1.12	1.03	2.393	
6011.	4.33	4.70	.012	.216	.000	.241	.343	1.16	1.06	.00	1.09	1.05	2.378	
6092.	4.60	4.73	.145	.028	.000	.059	.350	1.11	1.13	.00	1.07	1.13	2.391	
6191.	4.54	4.71	.212	.212	.000	.140	.380	1.15	1.14	.00	1.13	1.15	2.377	
5744.	6.36	3.73	.195	.287	.000	.204	.287	1.59	1.59	.00	1.61	1.58		TRIP
5805.	6.41	3.80	.178	.268	.000	.229	.296	1.60	1.59	.00	1.63	1.59		POINT
5909.	6.29	3.64	.179	.131	.000	.302	.269	1.59	1.55	.00	1.61	1.55		
6011.	6.28	3.72	.240	.239	.000	.265	.303	1.60	1.56	.00	1.59	1.55		
6092.	6.27	3.40	.173	.136	.000	.139	.304	1.55	1.58	.00	1.57	1.58		
6191.	6.01	1.31	.200	.193	.000	.149	.322	1.50	1.52	.00	1.51	1.53		
													AH IN	
5744.	5.55	.08	.204	.325	.000	.190	.415	1.39	1.39	.00	1.39	1.39	2.471	END OF
5805.	5.54	.07	.156	.298	.000	.200	.406	1.39	1.39	.00	1.39	1.39	2.574	CHARGE
5909.	5.53	.14	.132	.143	.000	.262	.400	1.40	1.38	.00	1.39	1.38	2.945	
6011.	5.49	.09	.151	.278	.000	.216	.406	1.39	1.38	.00	1.39	1.37	2.857	
6092.	5.53	.09	.212	.119	.000	.140	.460	1.39	1.39	.00	1.40	1.41	2.654	
6191.	5.54	.07	.225	.227	.000	.135	.432	1.39	1.39	.00	1.30	1.39	2.571	

911

PACK NO. 23 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 6 A.H. 3RD ELECTRODE R 12 18 20 29 24 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5		
5728.	5.80	2.99	.154	.171	.165	.186	.294	1.17	1.17	1.17	1.16	1.16	1.500	END OF
5788.	5.80	3.00	.152	.171	.159	.177	.297	1.17	1.17	1.17	1.16	1.16	1.500	DISCHARGE
5897.	5.77	3.09	.143	.159	.158	.189	.259	1.16	1.16	1.16	1.16	1.16	1.516	
5994.	5.76	3.04	.147	.172	.161	.200	.296	1.16	1.16	1.16	1.16	1.16	1.492	
6075.	5.96	3.09	.139	.159	.148	.188	.285	1.16	1.16	1.16	1.15	1.14	1.548	
6174.	5.78	3.11	.148	.159	.156	.197	.292	1.17	1.16	1.16	1.16	1.16	1.533	
5728.	7.11	.03	.205	.219	.226	.236	.290	1.43	1.43	1.43	1.42	1.43		TRIP
5788.	7.20	.41	.203	.219	.225	.228	.289	1.45	1.45	1.44	1.44	1.45		POINT
5897.	7.13	.08	.200	.219	.222	.241	.284	1.43	1.43	1.43	1.43	1.43		
5994.	7.06	.03	.206	.229	.232	.262	.332	1.42	1.42	1.42	1.42	1.42		
6075.	7.03	.03	.212	.229	.236	.261	.332	1.41	1.42	1.41	1.41	1.41		
6174.	7.05	.03	.209	.217	.226	.248	.340	1.42	1.42	1.42	1.41	1.42		
													AH IN	
5728.	6.89	.01	.209	.229	.232	.248	.366	1.38	1.39	1.39	1.38	1.38	1.585	END OF
5788.	6.90	.01	.202	.229	.226	.237	.365	1.38	1.39	1.39	1.38	1.38	1.656	CHARGE
5897.	6.90	.01	.198	.225	.225	.256	.354	1.38	1.39	1.39	1.39	1.38	1.801	
5994.	6.90	.02	.202	.232	.234	.266	.372	1.39	1.39	1.39	1.39	1.39	1.640	
6075.	6.89	.03	.219	.248	.252	.296	.410	1.39	1.39	1.39	1.40	1.40	1.782	
6174.	6.90	.02	.205	.219	.225	.262	.386	1.38	1.39	1.39	1.39	1.38	1.745	

117

PACK NO. 35 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
GULTON 6 A.H. 3RD ELECTRODE R 47 47 47 47 47 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.80	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5		
3729.	5.66	1.80	.125	.091	.091	.158	.174	1.13	1.13	1.13	1.15	1.15	.887	END OF
3895.	5.68	1.79	.125	.095	.095	.159	.169	1.14	1.14	1.13	1.15	1.15	.882	DISCHARGE
3993.	5.68	1.80	.128	.102	.097	.159	.182	1.14	1.14	1.13	1.16	1.15	.887	
4072.	5.70	1.82	.092	.077	.057	.121	.149	1.08	1.12	1.10	1.11	1.11	.898	
4171.	5.57	1.85	.114	.078	.081	.150	.178	1.11	1.12	1.11	1.13	1.13	.914	
3729.	6.96	.09	.235	.188	.192	.288	.297	1.40	1.40	1.40	1.40	1.39		TRIP
3895.	6.94	.07	.251	.205	.210	.453	.338	1.39	1.40	1.39	1.39	1.39		POINT
4072.	6.93	.08	.238	.189	.180	.287	.325	1.39	1.40	1.39	1.40	1.39		
4171.	6.99	.22	.227	.179	.179	.278	.302	1.40	1.41	1.40	1.41	1.40		
													AH IN	
3729.	6.82	.06	.273	.219	.221	.421	.393	1.37	1.37	1.37	1.37	1.36	1.141	END OF
3895.	6.82	.06	.273	.228	.228	.425	.397	1.37	1.37	1.37	1.37	1.37	1.309	CHARGE
3993.	6.83	.06	.272	.229	.229	.428	.408	1.37	1.38	1.37	1.37	1.37	1.172	
4072.	6.82	.06	.271	.215	.209	.430	.413	1.37	1.38	1.38	1.38	1.38	1.157	
4171.	6.81	.05	.269	.209	.210	.421	.408	1.37	1.37	1.37	1.37	1.37	1.154	

PACK NO. 47 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
GULTON 6 A.H. 3RD ELECTRODE R 11 47 12 36 47 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5		
4394.	5.71	2.94	.115	.137	.155	.097	.084	1.16	1.15	1.15	1.15	1.14	1.475	END OF
4455.	5.66	2.95	.114	.146	.145	.096	.089	1.15	1.14	1.14	1.14	1.13	1.478	DISCHARGE
4560.	5.64	2.95	.112	.142	.145	.097	.076	1.14	1.14	1.14	1.14	1.12	1.486	
4661.	5.67	2.98	.119	.134	.144	.108	.108	1.13	1.14	1.14	1.15	1.13	1.500	
4743.	5.76	2.95	.121	.140	.140	.112	.124	1.17	1.17	1.16	1.16	1.15	1.476	
4841.	5.65	2.94	.115	.112	.134	.102	.104	1.16	1.12	1.14	1.14	1.13	1.483	
4394.	6.98	.05	.257	.283	.431	.244	.241	1.41	1.41	1.40	1.40	1.40		TRIP
4455.	7.25	1.91	.267	.277	.287	.261	.259	1.44	1.45	1.45	1.47	1.46		POINT
4560.	6.97	.13	.259	.293	.428	.250	.230	1.41	1.41	1.40	1.40	1.39		
4661.	7.18	1.42	.274	.278	.292	.272	.278	1.44	1.45	1.44	1.46	1.45		
4743.	6.98	.11	.283	.271	.417	.276	.290	1.41	1.41	1.40	1.41	1.40		
4841.	7.16	1.48	.282	.217	.301	.266	.284	1.44	1.44	1.44	1.46	1.46		
4394.	6.82	.05	.231	.239	.389	.206	.199	1.37	1.37	1.37	1.37	1.36	1.996	END OF
4455.	6.81	.04	.242	.239	.393	.219	.212	1.37	1.37	1.37	1.37	1.36	2.093	CHARGE
4560.	6.81	.05	.233	.247	.390	.213	.194	1.38	1.38	1.37	1.37	1.36	2.128	
4661.	6.81	.05	.241	.238	.387	.225	.230	1.38	1.37	1.37	1.37	1.37	2.203	
4743.	6.80	.05	.252	.236	.380	.237	.001	1.37	1.37	1.37	1.37	1.36	2.186	
4841.	6.78	.04	.252	.187	.390	.220	.238	1.37	1.36	1.36	1.36	1.36	2.318	

6/1

PACK NO. 60 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
G.E. 12 A.H. 3RD ELECTRODE R 3 3 3 3 3 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5	AH OUT	
2244.	6.07	5.99	.077	.056	.025	.018	.007	1.22	1.23	1.22	1.23	1.22	2.976	END OF
2308.	6.01	6.07	.074	.054	.019	.015	.012	1.21	1.22	1.21	1.21	1.20	2.992	DISCHARGE
2411.	5.98	6.25	.119	.070	.030	.019	.007	1.21	1.21	1.20	1.21	1.20	3.114	
2513.	6.02	6.09	.090	.071	.025	.020	.026	1.21	1.22	1.21	1.22	1.21	3.031	
2595.	6.08	6.06	.115	.058	.026	.022	.031	1.23	1.23	1.22	1.23	1.22	3.002	
2692.	6.01	5.96	.104	.098	.027	.016	.026	1.21	1.22	1.21	1.21	1.20	2.960	
2244.	7.26	.96	.150	.217	.094	.412	.509	1.45	1.46	1.46	1.46	1.47		TRIP
2308.	7.37	.86	.119	.207	.063	.325	.493	1.46	1.49	1.47	1.49	1.49		POINT
2411.	7.30	.99	.170	.249	.092	.340	.447	1.46	1.47	1.46	1.47	1.47		
2513.	7.28	.92	.194	.255	.100	.348	.464	1.46	1.47	1.46	1.47	1.47		
2595.	7.34	1.00	.243	.359	.132	.471	.535	1.46	1.48	1.47	1.48	1.48		
2692.	7.30	.96	.141	.220	.075	.369	.431	1.46	1.47	1.46	1.47	1.47		
													AH IN	
2244.	7.43	.97	.754	.745	.659	.598	.595	1.50	1.51	1.50	1.48	1.48	3.138	END OF
2308.	7.47	.93	.744	.711	.616	.597	.605	1.50	1.51	1.51	1.49	1.49	3.217	CHARGE
2411.	7.50	1.02	.753	.709	.641	.639	.646	1.51	1.52	1.51	1.49	1.49	3.497	
2513.	7.43	.94	.746	.656	.579	.584	.606	1.49	1.50	1.50	1.48	1.48	3.110	
2595.	7.47	.96	.762	.715	.654	.618	.659	1.50	1.51	1.51	1.49	1.49	3.456	
2692.	7.51	.96	.764	.677	.657	.633	.648	1.51	1.53	1.51	1.50	1.50	3.239	

120

PACK NO. 48 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 0 C
G.E. 12 A.H. 3RD ELECTRODE R 3 3 3 3 3 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 9.60	3RD ELECT VOLTAGES 1	2	3	4	5	CELL VOLTAGES 1	2	3	4	5	AH OUT	
1589.	5.76	9.32	.085	.107	.012	.005	.003	1.15	1.14	1.17	1.17	1.17	4.708	
1645.	5.75	9.29	.083	.114	.009	.004	.009	1.15	1.14	1.17	1.17	1.16	4.699	END OF
1754.	5.73	9.47	.086	.112	.011	.004	.007	1.14	1.13	1.17	1.17	1.16	4.795	DISCHARGE
1851.	5.68	9.41	.112	.130	.017	.012	.022	1.13	1.12	1.16	1.17	1.16	4.814	
1933.	5.89	9.47	.121	.140	.020	.011	.032	1.19	1.19	1.19	1.19	1.19	4.761	
2030.	5.78	9.41	.104	.122	.012	.007	.024	1.16	1.16	1.17	1.17	1.17	4.749	
1589.	7.40	3.07	.252	.239	.090	.420	.073	1.48	1.47	1.47	1.50	1.50	AH IN	
1645.	7.91	8.12	.242	.244	.066	.423	.083	1.58	1.56	1.54	1.64	1.61		TRIP
1754.	7.51	5.00	.242	.243	.092	.421	.078	1.50	1.50	1.49	1.53	1.53		POINT
1851.	7.46	4.15	.219	.252	.076	.426	.068	1.49	1.48	1.48	1.53	1.51		
1933.	7.52	.51	.246	.259	.318	.473	.379	1.49	1.48	1.51	1.54	1.54		
2030.	7.19	.47	.249	.237	.217	.512	.185	1.45	1.44	1.44	1.46	1.44		
													AH IN	
1589.	7.20	.49	.252	.224	.430	.139	.357	1.43	1.43	1.46	1.44	1.46	4.923	
1645.	7.19	.48	.246	.228	.413	.137	.358	1.00	1.43	1.46	1.44	1.46	4.813	END OF
1754.	7.19	.45	.243	.226	.413	.144	.356	1.43	1.43	1.46	1.44	1.46	5.333	CHARGE
1851.	7.19	.52	.222	.233	.419	.152	.366	1.43	1.43	1.46	1.44	1.46	4.994	
1933.	7.20	.47	.279	.245	.446	.216	.441	1.44	1.44	1.46	1.45	1.47	4.934	
2030.	7.18	.45	.258	.231	.414	.188	.430	1.43	1.43	1.45	1.44	1.46	4.632	

121

PACK NO. 175 DEPTH OF DISCHARGE 25 TEST TEMPERATURE -20 C
SONOTONE 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	
1851.	3.03	2.39	1.04	1.08	.00	.00	.98	END OF DISCHARGE
1881.	3.02	2.45	1.04	1.08	.00	.00	.97	
1958.	3.05	2.40	1.04	1.09	.00	.00	.98	
1988.	3.04	2.43	1.03	1.09	.00	.00	.98	
2057.	2.97	2.43	.99	1.06	.00	.00	.99	
2089.	2.98	2.42	1.01	1.06	.00	.00	.97	
		5.00						
1851.	4.86	5.22	1.62	1.57	.00	.00	1.61	END OF CHARGE
1881.	4.92	5.08	1.64	1.60	.00	.00	1.63	
1958.	4.94	5.00	1.64	1.61	.00	.00	1.63	
1988.	4.94	5.05	1.64	1.61	.00	.00	1.63	
2057.	4.92	5.04	1.63	1.58	.00	.00	1.65	
2089.	4.90	5.04	1.63	1.58	.00	.00	1.62	

PACK NO. 92 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
SONOTONC 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	
2703.	5.56	2.48	1.10	1.12	1.13	1.12	1.08	END OF DISCHARGE
2733.	5.53	2.46	1.10	1.12	1.12	1.12	1.06	
2810.	5.48	2.48	1.09	1.11	1.12	1.11	1.04	
2840.	5.50	2.48	1.10	1.11	1.12	1.12	1.04	
2909.	5.40	2.49	1.08	1.09	1.10	1.10	1.02	
2975.	5.62	2.48	1.11	1.13	1.13	1.13	1.12	
3008.	5.55	2.49	1.10	1.12	1.12	1.11	1.10	
3071.	5.97	2.47	1.24	1.05	1.23	1.24	1.22	
		5.00						
2703.	8.02	5.07	1.58	1.57	1.58	1.61	1.70	END OF CHARGE
2733.	8.01	5.07	1.58	1.57	1.57	1.60	1.70	
2810.	7.98	5.11	1.57	1.56	1.57	1.60	1.66	
2840.	7.97	5.02	1.58	1.57	1.58	1.60	1.66	
2909.	7.98	5.01	1.58	1.56	1.57	1.60	1.66	
2975.	7.89	5.02	1.56	1.56	1.57	1.60	1.61	
3008.	7.92	5.01	1.57	1.56	1.57	1.61	1.61	
3071.	7.31	5.01	1.44	1.55	1.44	1.45	1.44	

PACK NO. 322 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 0
SONOTONC 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.00	CELL VOLTAGES 1	2	3	4	5	
2492.	4.25	3.98	1.03	1.10	.00	1.09	1.09	END OF
2522.	4.22	3.99	1.02	1.08	.00	1.08	1.07	DISCHARGE
2599.	4.22	3.91	1.04	1.07	.00	1.07	1.07	
2629.	4.20	3.91	1.03	1.07	.00	1.07	1.06	
2698.	4.15	3.95	1.02	1.06	.00	1.06	1.04	
2764.	4.31	3.95	1.08	1.07	.00	1.05	1.06	
2801.	4.19	3.98	1.05	1.07	.00	1.05	1.06	
2852.	4.20	4.00	1.05	1.07	.00	1.05	1.07	
		5.00						
2492.	6.28	5.06	1.57	1.55	.00	1.58	1.58	END OF
2522.	6.29	5.11	1.59	1.54	.00	1.57	1.57	CHARGE
2599.	6.29	5.07	1.58	1.54	.00	1.57	1.58	
2629.	6.28	4.81	1.57	1.54	.00	1.57	1.58	
2698.	6.28	4.94	1.58	1.54	.00	1.58	1.57	
2764.	6.34	4.95	1.58	1.54	.00	1.56	1.56	
2801.	6.30	4.99	1.59	1.55	.00	1.58	1.57	
2852.	6.25	5.27	1.55	1.54	.00	1.57	1.57	

PACK NO. 273 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
SONOTONE 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	
3032.	3.14	2.35	.02	.02	1.08	1.09	1.03	END OF DISCHARGE
3062.	3.17	2.35	.02	.02	1.08	1.09	1.06	
3101.	3.13	2.32	.02	.01	1.07	1.09	1.03	
3230.	3.03	2.32	.02	.02	1.07	1.08	.95	
3262.	3.14	2.38	.02	.02	1.08	1.10	1.02	
3295.	3.08	2.33	.02	.02	1.07	1.08	.99	
3344.	3.19	2.40	.02	.02	1.09	1.09	1.07	
3378.	3.08	2.30	.02	.02	1.07	1.08	.99	
3440.	3.04	2.48	.02	.02	1.04	1.05	1.00	
		5.00						
3032.	4.35	5.05	.03	.03	1.43	1.42	1.42	END OF CHARGE
3062.	4.38	5.00	.03	.03	1.44	1.43	1.44	
3101.	4.35	5.08	.03	.04	1.43	1.43	1.43	
3230.	4.35	5.09	.03	.03	1.43	1.42	1.42	
3262.	4.38	5.13	.03	.03	1.44	1.43	1.42	
3295.	4.37	5.08	.03	.03	1.44	1.43	1.42	
3344.	4.37	5.07	.03	.03	1.43	1.43	1.43	
3378.	4.35	5.07	.03	.03	1.43	1.42	1.41	
3440.	4.37	5.06	.03	.03	1.44	1.43	1.42	

PACK NO. 299 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
SONOTONE 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.50	CELL VOLTAGES 1	2	3	4	5	
2754.	5.42	2.51	1.13	1.08	1.07	1.10	1.09	END OF DISCHARGE
2784.	5.43	2.49	1.13	1.08	1.05	1.09	1.08	
2861.	5.32	2.51	1.12	1.07	1.02	1.07	1.08	
2891.	5.29	2.50	1.13	1.07	1.01	1.07	1.06	
2960.	5.20	2.51	1.12	1.05	.97	1.05	1.05	
2992.	5.18	2.50	1.12	1.04	.95	1.05	1.03	
3025.	5.22	2.47	1.12	1.05	.96	1.05	1.03	
3074.	5.41	2.44	1.15	1.07	1.05	1.10	1.07	
3107.	5.28	2.49	1.13	1.05	1.01	1.08	1.03	
3170.	5.12	2.49	1.12	1.03	.94	1.04	1.02	
		5.00						
2754.	7.35	5.04	1.48	1.48	1.48	1.47	1.47	END OF CHARGE
2784.	7.36	5.04	1.48	1.47	1.47	1.46	1.47	
2861.	7.35	4.98	1.48	1.48	1.47	1.47	1.48	
2891.	7.36	5.01	1.48	1.48	1.47	1.47	1.47	
2960.	7.34	5.00	1.48	1.47	1.47	1.47	1.48	
2992.	7.35	5.04	1.48	1.47	1.46	1.46	1.47	
3025.	7.38	5.01	1.48	1.47	1.46	1.46	1.46	
3074.	7.34	4.96	1.48	1.47	1.47	1.47	1.47	
3107.	7.34	4.97	1.48	1.47	1.47	1.47	1.46	
3170.	7.34	4.97	1.48	1.48	1.48	1.47	1.47	

PACK NO. 312 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 40 C
SONOTONE 5 A.H. STABISTER ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.51	CELL VOLTAGES 1	2	3	4	5	
2847.	3.91	1.48	1.00	.00	1.08	.94	.93	END OF DISCHARGE
2876.	3.88	1.49	.99	.00	1.07	.94	.91	
2954.	3.88	1.48	.99	.00	1.08	.93	.91	
2983.	3.84	1.47	.98	.00	1.08	.91	.90	
3052.	3.82	1.47	.98	.00	1.07	.92	.87	
3084.	3.74	1.48	.97	.00	1.08	.90	.81	
3166.	4.20	1.50	1.06	.00	1.10	1.03	1.03	
3200.	4.01	1.52	1.03	.00	1.08	.96	.97	
3262.	3.96	1.52	1.02	.00	1.08	.94	.95	
		5.00						
2847.	5.92	5.01	1.47	.00	1.43	1.45	1.48	END OF CHARGE
2876.	5.93	4.99	1.47	.00	1.44	1.45	1.48	
2954.	5.93	5.00	1.46	.00	1.43	1.44	1.48	
2983.	5.93	5.02	1.47	.00	1.44	1.45	1.48	
3052.	5.90	5.00	1.47	.00	1.44	1.45	1.48	
3084.	5.90	5.03	1.46	.00	1.43	1.45	1.48	
3166.	5.89	4.96	1.46	.00	1.43	1.44	1.47	
3200.	5.90	4.97	1.46	.00	1.43	1.45	1.47	
3262.	5.92	4.97	1.47	.00	1.44	1.45	1.48	

PACK NO. 174 — DEPTH OF DISCHARGE 25 — TEST TEMPERATURE -20 C
GU 1.25 A.H. — PERCENT OF RECHARGE — ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES 1	2	3	4	5	
		.63						
1.	7.16	.66	1.44	1.44	1.44	1.44	1.44	END OF DISCHARGE
3.	6.61	.65	1.35	1.35	1.26	1.35	1.34	
9.	6.88	.66	1.33	1.48	1.24	1.34	1.51	
17.	7.33	.66	1.46	1.51	1.44	1.42	1.53	
58.	7.34	.65	1.42	1.51	1.51	1.38	1.55	
90.	7.62	.66	1.52	1.52	1.53	1.53	1.54	
		1.25						
1.	9.65	1.29	1.91	1.93	1.92	1.92	1.97	END OF CHARGE
3.	9.61	1.29	1.90	1.92	1.95	1.89	1.96	
9.	9.43	1.03	1.88	1.80	1.99	1.93	1.84	
17.	9.43	1.03	1.92	1.86	1.91	1.89	1.86	
58.	9.49	1.03	1.89	1.91	1.88	1.95	1.88	
90.	9.23	1.02	1.89	1.86	1.82	1.85	1.84	

128

PACK NO. 388
GU 1.25 A.H.

DEPTH OF DISCHARGE 60
PERCENT OF RECHARGE

TEST TEMPERATURE -20 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES 1	2	3	4	5	
1.	5.37	1.50	1.08	1.03	1.08	1.07	1.10	END OF
3.	5.27	1.49	1.08	.97	1.08	1.06	1.10	DISCHARGE
9.	3.94	1.40	.94	.33	.93	.76	.99	
17.	2.18	1.50	.81	.52	.87	.24	.78	
37.	7.04	1.02	1.44	1.23	1.45	1.45	1.47	
		1.25						
1.	9.76	1.17	1.95	1.95	1.96	1.94	1.94	END OF
3.	9.88	1.26	1.97	1.98	1.98	1.97	1.96	CHARGE
9.	9.75	1.01	1.97	2.06	1.89	1.94	1.87	
17.	9.68	1.01	1.89	2.06	1.90	1.91	1.90	
37.	9.85	1.01	1.93	2.06	1.93	1.99	1.93	

129

PACK NO. 198 DEPTH OF DISCHARGE 60 TEST TEMPERATURE 0 C
GU 1.25 A.H. PERCENT OF RECHARGE ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 1.5	CELL VOLTAGES 1	2	3	4	5	
1.	8.09	1.43	1.62	1.61	1.63	1.63	1.62	END OF DISCHARGE
75.	7.91	1.32	1.59	1.59	1.58	1.58	1.58	
104.	6.14	1.49	1.23	1.24	1.24	1.24	1.25	
173.	5.68	1.49	1.13	1.14	1.15	1.14	1.16	
205.	5.67	1.49	1.13	1.14	1.15	1.14	1.14	
246.	5.68	1.49	1.13	1.14	1.13	1.14	1.14	
287.	5.67	1.53	1.13	1.14	1.14	1.15	1.13	
326.	5.63	1.50	1.12	1.13	1.12	1.13	1.13	
381.	5.69	1.50	1.14	1.15	1.15	1.15	1.14	
		1.25						
1.	7.10	.01	1.42	1.43	1.43	1.43	1.43	END OF CHARGE
75.	8.49	1.24	1.70	1.70	1.70	1.70	1.70	
104.	8.91	1.23	1.80	1.81	1.79	1.79	1.76	
173.	8.79	1.23	1.76	1.79	1.76	1.76	1.74	
205.	8.76	1.23	1.76	1.79	1.75	1.76	1.72	
246.	8.72	1.23	1.75	1.77	1.72	1.74	1.71	
287.	8.66	1.26	1.74	1.77	1.72	1.75	1.70	
326.	8.76	1.25	1.76	1.78	1.73	1.75	1.72	
381.	8.70	1.25	1.76	1.78	1.74	1.75	1.70	

130

PACK NO. 308 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GU 1.25 A.H. PERCENT OF RECHARGE ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT	CELL VOLTAGES 1	2	3	4	5	
1.	7.19	.63	1.44	1.43	1.44	1.44	1.43	
75.	7.25	.63	1.44	1.45	1.45	1.45	1.45	END OF DISCHARGE
104.	7.26	.62	1.44	1.45	1.45	1.45	1.45	
173.	7.25	.66	1.44	1.44	1.45	1.45	1.45	
205.	7.25	.65	1.44	1.44	1.45	1.45	1.45	
246.	7.25	.62	1.44	1.45	1.47	1.46	1.45	
287.	7.24	.63	1.44	1.44	1.45	1.44	1.45	
326.	7.21	.62	1.44	1.45	1.46	1.45	1.44	
381.	7.25	.62	1.44	1.45	1.45	1.45	1.45	
		.25						
1.	8.73	1.27	1.78	1.78	1.71	1.81	1.73	END OF CHARGE
75.	8.56	1.25	1.69	1.71	1.72	1.72	1.70	
104.	8.58	1.24	1.70	1.71	1.73	1.73	1.71	
173.	8.51	1.25	1.68	1.70	1.72	1.71	1.70	
205.	8.53	1.25	1.68	1.70	1.72	1.71	1.70	
246.	8.52	1.25	1.68	1.71	1.73	1.72	1.70	
287.	8.46	1.29	1.66	1.69	1.71	1.70	1.69	
326.	8.54	1.28	1.68	1.72	1.74	1.72	1.71	
381.	8.62	1.28	1.69	1.73	1.75	1.73	1.72	

PACK NO. 315 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GULTON 4 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	CELL VOLTAGES 1	2	3	4	5	
8570.	6.19	1.18	1.24	1.24	1.24	1.24	1.24	END OF DISCHARGE
8639.	6.19	1.19	1.24	1.24	1.24	1.24	1.25	
8707.	6.20	1.19	1.24	1.23	1.23	1.24	1.23	
8776.	6.19	1.17	1.24	1.24	1.24	1.24	1.24	
8808.	6.17	1.18	1.24	1.23	1.24	1.24	1.23	
8841.	6.16	1.19	1.23	1.23	1.24	1.23	1.22	
8890.	6.23	1.18	1.25	1.24	1.25	1.25	1.25	
8924.	6.22	1.18	1.25	1.24	1.25	1.25	1.24	
8986.	6.23	1.18	1.25	1.24	1.26	1.25	1.24	
		.69						
8570.	7.65	.42	1.51	1.58	1.51	1.54	1.53	END OF CHARGE
8639.	7.76	.56	1.53	1.62	1.52	1.57	1.55	
8707.	7.80	.55	1.53	1.60	1.51	1.56	1.53	
8776.	7.72	.57	1.53	1.60	1.52	1.56	1.54	
8808.	7.72	.55	1.53	1.60	1.52	1.56	1.53	
8841.	7.71	.54	1.53	1.59	1.52	1.56	1.53	
8890.	7.74	.52	1.53	1.60	1.52	1.56	1.55	
8924.	7.77	.56	1.54	1.61	1.53	1.57	1.55	
8986.	7.73	.50	1.53	1.60	1.52	1.57	1.54	

PACK NO. 326 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 4 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGES 1	2	3	4	5	
9042.	5.95	1.99	1.19	1.20	1.19	1.19	1.19	END OF DISCHARGE
9071.	5.95	1.98	1.19	1.19	1.19	1.19	1.20	
9149.	5.94	2.01	1.19	1.20	1.19	1.19	1.20	
9178.	5.95	1.99	1.19	1.20	1.19	1.19	1.20	
9247.	5.94	1.98	1.19	1.19	1.19	1.19	1.20	
9279.	5.92	1.99	1.19	1.19	1.19	1.18	1.18	
9361.	5.98	2.00	1.20	1.20	1.20	1.20	1.20	
9395.	5.96	2.03	1.19	1.20	1.19	1.19	1.19	
9457.	5.99	2.00	1.20	1.21	1.20	1.20	1.20	
		1.15						
9042.	7.69	.61	1.54	1.52	1.55	1.56	1.53	END OF CHARGE
9071.	7.69	.61	1.54	1.52	1.55	1.55	1.53	
9149.	7.70	.66	1.54	1.53	1.55	1.56	1.54	
9178.	7.71	.65	1.55	1.53	1.56	1.56	1.54	
9247.	7.81	.81	1.57	1.54	1.57	1.58	1.56	
9279.	7.76	.71	1.56	1.53	1.56	1.57	1.54	
9361.	7.75	.66	1.56	1.53	1.56	1.57	1.54	
9395.	7.75	.67	1.56	1.53	1.57	1.57	1.53	
9457.	7.74	.67	1.56	1.53	1.57	1.57	1.53	

PACK NO. 204 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 4 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGES 1	2	3	4	5	
8844.	5.77	1.97	1.16	1.16	1.18	1.16	1.16	END OF
8873.	5.78	1.95	1.16	1.16	1.18	1.16	1.17	DISCHARGE
8951.	5.70	2.00	1.15	1.13	1.16	1.15	1.15	
8980.	5.72	2.02	1.15	1.14	1.16	1.15	1.15	
9049.	6.56	2.01	1.32	1.33	1.33	1.30	1.33	
9080.	5.73	2.00	1.15	1.14	1.17	1.15	1.14	
9125.	5.73	1.99	1.15	1.14	1.17	1.14	1.15	
9163.	5.84	2.00	1.17	1.17	1.18	1.17	1.17	
9196.	5.79	2.00	1.16	1.16	1.18	1.16	1.15	
9259.	5.83	1.99	1.17	1.17	1.19	1.16	1.16	
		1.25						
8844.	7.34	1.29	1.47	1.46	1.46	1.53	1.48	END OF
8873.	7.36	1.23	1.47	1.45	1.46	1.53	1.49	CHARGE
8951.	7.38	1.22	1.48	1.46	1.46	1.54	1.48	
8980.	7.38	1.23	1.47	1.46	1.46	1.55	1.48	
9049.	7.34	1.25	1.47	1.45	1.45	1.53	1.48	
9080.	7.33	1.27	1.47	1.45	1.46	1.53	1.47	
9125.	7.35	1.24	1.47	1.45	1.46	1.54	1.47	
9163.	7.27	1.09	1.46	1.44	1.44	1.50	1.46	
9196.	7.34	1.27	1.47	1.45	1.45	1.53	1.47	
9259.	7.36	1.27	1.47	1.46	1.46	1.54	1.48	

PACK NO. 214
GULTON 4 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.20	CELL VOLTAGES 1	2	3	4	5	
8402.	4.30	3.11	1.09	1.12	.00	1.09	1.04	
8431.	4.03	3.18	.97	1.11	.00	1.08	.92	END OF DISCHARGE
8474.	2.97	3.13	.82	1.09	.00	1.07	.03	
		2.00						
8402.	5.95	1.76	1.44	1.52	.00	1.58	1.44	
8431.	5.94	1.78	1.44	1.52	.00	1.58	1.44	END OF CHARGE
8474.	5.97	2.05	1.44	1.53	.00	1.59	1.44	

PACK NO. 228 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
GULTON 4 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.20	CELL VOLTAGES 1	2	3	4	5	
8737.	5.95	1.18	1.20	1.21	1.20	1.19	1.20	END OF DISCHARGE
8766.	5.96	1.13	1.20	1.20	1.21	1.19	1.21	
8844.	5.94	1.19	1.19	1.20	1.20	1.18	1.20	
8873.	5.92	1.20	1.19	1.20	1.20	1.18	1.19	
8942.	5.91	1.21	1.19	1.19	1.19	1.17	1.20	
8973.	5.93	1.19	1.19	1.20	1.20	1.18	1.19	
9056.	5.96	1.18	1.20	1.20	1.20	1.18	1.20	
9089.	6.79	1.19	1.36	1.37	1.37	1.37	1.36	
9152.	5.96	1.21	1.20	1.21	1.21	1.19	1.19	
		.96						
8737.	7.11	.76	1.43	1.43	1.43	1.43	1.43	END OF CHARGE
8766.	7.08	.64	1.43	1.42	1.43	1.42	1.43	
8844.	7.12	.73	1.44	1.43	1.43	1.43	1.43	
8873.	7.10	.67	1.43	1.42	1.43	1.43	1.43	
8942.	7.10	.70	1.43	1.42	1.43	1.43	1.44	
8973.	7.12	.72	1.44	1.42	1.43	1.43	1.42	
9056.	7.08	.69	1.43	1.41	1.42	1.42	1.42	
9089.	7.13	.84	1.44	1.42	1.43	1.43	1.43	
9152.	7.15	.81	1.44	1.43	1.44	1.44	1.43	

136

PACK NO. 240 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
GULTON 4 A. H. PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.00	CELL VOLTAGES 1	2	3	4	5	
8771.	4.54	1.97	1.14	1.15	1.16	.00	1.13	END OF
8800.	4.51	1.91	1.15	1.13	1.14	.00	1.13	DISCHARGE
8878.	3.96	1.98	1.12	.60	1.13	.00	1.14	
8907.	4.49	1.98	1.14	1.13	1.12	.00	1.12	
8976.	4.41	1.99	1.14	1.04	1.14	.00	1.13	
9007.	4.29	2.01	1.14	1.01	1.05	.00	1.12	
9052.	4.26	2.00	1.14	.95	1.08	.00	1.11	
9090.	4.41	2.03	1.14	1.10	1.07	.00	1.13	
9123.	4.34	2.02	1.15	1.08	1.00	.00	1.12	
9186.	4.41	2.01	1.14	1.05	1.13	.00	1.12	
		1.60						
8771.	5.82	1.64	1.47	1.45	1.46	.00	1.48	END OF
8800.	5.80	1.55	1.46	1.45	1.45	.00	1.47	CHARGE
8878.	5.78	1.60	1.46	1.41	1.46	.00	1.47	
8907.	5.80	1.52	1.46	1.44	1.45	.00	1.46	
8976.	5.77	1.41	1.46	1.43	1.46	.00	1.46	
9007.	5.77	1.49	1.46	1.43	1.44	.00	1.45	
9052.	5.77	1.42	1.46	1.43	1.45	.00	1.45	
9090.	5.77	1.34	1.45	1.44	1.44	.00	1.46	
9123.	5.77	1.35	1.46	1.44	1.44	.00	1.45	
9186.	5.79	1.24	1.46	1.44	1.46	.00	1.45	

PACK NO. 216 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
GULTON 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES 1	2	3	4	5	
5780.	6.24	3.64	1.25	1.26	1.26	1.26	1.26	END OF
5809.	6.25	3.57	1.25	1.26	1.26	1.26	1.26	DISCHARGE
5887.	6.24	3.58	1.25	1.26	1.26	1.26	1.26	
5916.	6.24	3.57	1.25	1.26	1.26	1.26	1.25	
5985.	6.22	3.58	1.25	1.25	1.25	1.25	1.26	
6016.	6.20	3.58	1.24	1.25	1.25	1.25	1.24	
6061.	6.20	3.58	1.24	1.25	1.25	1.25	1.24	
6099.	6.23	3.70	1.25	1.25	1.25	1.26	1.25	
6132.	6.22	3.64	1.25	1.25	1.26	1.26	1.24	
6195.	6.22	3.62	1.25	1.26	1.26	1.26	1.25	
		2.07						
5780.	7.48	1.07	1.56	1.50	1.48	1.49	1.51	END OF
5809.	7.50	.96	1.57	1.49	1.48	1.48	1.51	CHARGE
5887.	7.54	1.13	1.57	1.50	1.50	1.50	1.53	
5916.	7.52	1.04	1.57	1.50	1.48	1.49	1.51	
5985.	7.50	1.07	1.58	1.49	1.48	1.48	1.51	
6016.	7.52	1.04	1.59	1.49	1.48	1.49	1.50	
6061.	7.53	1.04	1.59	1.50	1.48	1.49	1.50	
6099.	7.48	1.19	1.56	1.48	1.48	1.48	1.51	
6132.	7.52	1.10	1.58	1.49	1.48	1.49	1.51	
6195.	7.52	1.08	1.59	1.49	1.48	1.49	1.51	

PACK NO. 301 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 12 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
6642.	4.78	5.96	1.21	1.21	1.20	.00	1.20	END OF DISCHARGE
6672.	4.78	5.94	1.21	1.21	1.20	.00	1.20	
6711.	4.77	5.98	1.20	1.21	1.20	.00	1.19	
6779.	4.77	5.98	1.21	1.22	1.21	.00	1.21	
6848.	4.76	5.96	1.20	1.20	1.20	.00	1.19	
6880.	4.75	6.00	1.20	1.20	1.19	.00	1.19	
6913.	4.77	6.03	1.20	1.19	1.10	.00	1.19	
6962.	4.76	6.11	1.20	1.19	1.19	.00	1.19	
7058.	4.80	5.95	1.21	1.20	1.20	.00	1.20	
		3.45						
6642.	6.17	1.76	1.54	1.53	1.52	.00	1.57	END OF CHARGE
6672.	6.23	2.01	1.56	1.54	1.53	.00	1.60	
6711.	6.17	1.87	1.54	1.53	1.52	.00	1.56	
6779.	6.17	1.86	1.54	1.54	1.53	.00	1.58	
6848.	6.18	1.80	1.54	1.54	1.52	.00	1.57	
6880.	6.17	1.83	1.54	1.54	1.52	.00	1.57	
6913.	6.39	2.50	1.59	1.60	1.56	.00	1.64	
6962.	6.34	2.09	1.57	1.61	1.55	.00	1.60	
7058.	6.24	1.70	1.56	1.58	1.53	.00	1.58	

PACK NO. 227 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 12 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGE 1	2	3	4	5	
6036.	5.62	5.98	1.13	1.14	1.13	1.13	1.14	END OF DISCHARGE
6066.	5.64	6.00	1.14	1.14	1.14	1.14	1.14	
6143.	5.55	5.95	1.10	1.14	1.11	1.12	1.14	
6173.	5.62	5.93	1.12	1.14	1.13	1.14	1.14	
6242.	5.64	5.94	1.13	1.14	1.13	1.14	1.15	
6274.	5.64	5.96	1.13	1.14	1.14	1.14	1.13	
6307.	5.68	5.94	1.14	1.15	1.14	1.15	1.14	
6356.	5.64	5.98	1.13	1.14	1.13	1.14	1.14	
6389.	5.58	6.01	1.11	1.13	1.12	1.12	1.12	
6452.	5.68	5.95	1.15	1.15	1.15	1.14	1.14	
		3.75						
6036.	7.31	3.91	1.45	1.47	1.48	1.47	1.48	END OF CHARGE
6066.	7.32	3.92	1.45	1.47	1.48	1.48	1.48	
6143.	7.28	3.77	1.44	1.47	1.46	1.46	1.48	
6173.	7.33	3.76	1.45	1.48	1.48	1.48	1.48	
6242.	7.31	3.76	1.45	1.47	1.47	1.47	1.49	
6274.	7.31	3.79	1.45	1.47	1.48	1.47	1.47	
6307.	7.35	3.76	1.45	1.48	1.48	1.48	1.49	
6356.	7.36	3.85	1.45	1.48	1.48	1.48	1.49	
6389.	7.30	3.85	1.45	1.47	1.47	1.47	1.47	
6452.	7.35	3.82	1.45	1.49	1.48	1.48	1.48	

PACK NO. 78 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 40 C
GULTON 12 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.60	CELL VOLTAGES 1	2	3	4	5	
6597.	4.57	3.59	1.15	1.14	1.16	.00	1.16	END OF
6627.	4.58	3.61	1.15	1.14	1.16	.00	1.17	DISCHARGE
6704.	4.53	3.64	1.14	1.13	1.15	.00	1.16	
6734.	4.60	3.61	1.15	1.14	1.16	.00	1.17	
6803.	4.55	3.59	1.14	1.13	1.15	.00	1.16	
6835.	4.56	3.58	1.14	1.14	1.16	.00	1.14	
6868.	4.56	3.60	1.15	1.13	1.15	.00	1.15	
6917.	4.54	3.63	1.14	1.13	1.15	.00	1.15	
6950.	4.54	3.62	1.14	1.13	1.16	.00	1.14	
7013.	6.09	3.59	1.22	1.27	1.24	.00	1.23	
		2.88						
6597.	5.76	2.95	1.44	1.44	1.46	.00	1.43	END OF
6627.	5.76	2.93	1.44	1.44	1.46	.00	1.44	CHARGE
6704.	5.77	2.82	1.44	1.45	1.45	.00	1.44	
6734.	5.72	2.36	1.43	1.43	1.44	.00	1.42	
6803.	5.75	2.27	1.43	1.44	1.45	.00	1.44	
6835.	5.74	2.28	1.43	1.44	1.46	.00	1.42	
6868.	5.74	2.30	1.44	1.44	1.45	.00	1.43	
6917.	5.76	2.93	1.44	1.44	1.45	.00	1.43	
6950.	5.77	2.91	1.44	1.44	1.46	.00	1.42	
7013.	7.14	2.87	1.43	1.43	1.43	.00	1.43	

141

PACK NO. 213 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON HSI 6 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	
5745.	5.99	3.00	1.20	1.20	1.20	1.21	1.21	END OF DISCHARGE
5775.	5.99	2.99	1.20	1.20	1.20	1.21	1.21	
5814.	5.99	3.03	1.20	1.21	1.20	1.21	1.21	
5882.	5.99	3.03	1.20	1.21	1.21	1.21	1.21	
5951.	5.99	3.01	1.20	1.20	1.21	1.21	1.21	
5983.	5.98	3.02	1.20	1.20	1.21	1.21	1.20	
6016.	5.98	3.04	1.20	1.20	1.20	1.20	1.19	
6065.	6.03	2.97	1.21	1.21	1.21	1.21	1.21	
6099.	6.01	2.99	1.21	1.21	1.21	1.21	1.21	
6161.	6.06	3.00	1.21	1.22	1.22	1.22	1.21	
		1.73						
5745.	7.69	.86	1.52	1.53	1.52	1.58	1.57	END OF CHARGE
5775.	7.78	.98	1.54	1.55	1.54	1.60	1.61	
5814.	7.77	.96	1.54	1.56	1.53	1.60	1.59	
5882.	7.76	.98	1.53	1.55	1.53	1.60	1.58	
5951.	7.74	.93	1.53	1.54	1.53	1.60	1.58	
5983.	7.75	.94	1.54	1.55	1.54	1.60	1.58	
6016.	7.75	.92	1.53	1.54	1.53	1.59	1.57	
6065.	7.72	.94	1.53	1.54	1.53	1.58	1.57	
6099.	7.73	.90	1.53	1.54	1.53	1.59	1.57	
6161.	7.75	.88	1.53	1.54	1.54	1.60	1.57	

241

PACK NO. 218
GULTON HSI 6 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 4.80	CELL VOLTAGES 1	2	3	4	5	
5617.	4.43	4.70	1.12	.00	1.13	1.11	1.10	END OF DISCHARGE
5647.	4.46	4.71	1.13	.00	1.13	1.12	1.11	
5754.	4.40	4.62	1.13	.00	1.12	1.11	1.08	
5763.	4.34	4.61	1.11	.00	1.11	1.08	1.07	
5855.	4.34	4.63	1.11	.00	1.11	1.08	1.05	
5918.	4.56	4.72	1.15	.00	1.12	1.17	1.15	
5928.	4.41	4.67	1.12	.00	1.12	1.11	1.09	
5966.	5.81	3.75	1.18	.00	1.18	1.18	1.13	
6014.	4.49	4.67	1.14	.00	1.13	1.14	1.11	
		3.00						
5617.	6.04	1.33	1.51	.00	1.53	1.50	1.53	END OF CHARGE
5647.	6.05	1.47	1.52	.00	1.54	1.51	1.54	
5754.	6.09	1.32	1.52	.00	1.55	1.52	1.54	
5763.	6.06	1.35	1.52	.00	1.53	1.51	1.54	
5855.	6.07	1.36	1.53	.00	1.54	1.51	1.53	
5918.	5.89	1.69	1.49	.00	1.50	1.46	1.47	
5928.	6.05	1.36	1.52	.00	1.53	1.51	1.52	
5966.	7.65	1.19	1.54	.00	1.56	1.53	1.52	
6014.	6.08	1.32	1.52	.00	1.54	1.51	1.53	

PACK NO. 238 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
GULTON HSI 6 A.H. PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 3.00	CELL VOLTAGES 1	2	3	4	5	
5318.	3.39	2.92	1.15	.00	1.17	1.11	.00	END OF
5425.	3.37	2.99	1.15	.00	1.15	1.12	.00	DISCHARGE
5454.	3.37	2.97	1.15	.00	1.16	1.11	.00	
5523.	3.74	2.55	1.27	.00	1.27	1.22	.00	
5555.	3.70	2.58	1.25	.00	1.25	1.20	.00	
5589.	3.70	2.57	1.26	.00	1.25	1.19	.00	
5637.	3.29	2.99	1.14	.00	1.14	1.05	.00	
5671.	2.86	2.67	1.12	.00	1.04	.74	.00	
5733.	3.65	2.55	1.26	.00	1.27	1.12	.00	
		2.40						
5318.	4.36	2.06	1.46	.00	1.46	1.46	.00	END OF
5425.	4.36	1.99	1.46	.00	1.44	1.47	.00	CHARGE
5454.	4.37	1.98	1.45	.00	1.46	1.47	.00	
5523.	4.36	2.23	1.46	.00	1.46	1.46	.00	
5555.	4.35	2.24	1.46	.00	1.46	1.45	.00	
5589.	4.33	2.14	1.46	.00	1.44	1.44	.00	
5637.	4.36	1.71	1.46	.00	1.44	1.47	.00	
5671.	4.32	1.28	1.44	.00	1.44	1.45	.00	
5733.	4.30	1.13	1.44	.00	1.44	1.43	.00	

144

PACK NO. 243 DEPTH OF DISCHARGE 15 TEST TEMPERATURE 0 C
SONOTONE 3 A.H. PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES 1	2	3	4	5	
3670.	6.04	.90	1.21	1.21	1.21	1.22	1.23	END OF
3747.	6.05	.90	1.21	1.21	1.21	1.22	1.23	DISCHARGE
3777.	6.05	.90	1.21	1.21	1.21	1.22	1.23	
3846.	6.03	.91	1.21	1.21	1.21	1.22	1.23	
3878.	6.04	.91	1.21	1.21	1.21	1.22	1.22	
3960.	6.06	.91	1.21	1.21	1.22	1.22	1.21	
4046.	6.08	.90	1.22	1.22	1.22	1.23	1.22	
		.52						
3670.	7.73	.22	1.47	1.49	1.50	1.63	1.69	END OF
3747.	7.73	.23	1.47	1.50	1.50	1.61	1.68	CHARGE
3777.	7.76	.24	1.48	1.51	1.51	1.61	1.70	
3846.	7.72	.26	1.48	1.50	1.51	1.59	1.70	
3878.	7.73	.26	1.48	1.50	1.51	1.60	1.68	
3960.	7.72	.19	1.46	1.48	1.48	1.67	1.66	
4046.	7.69	.23	1.46	1.48	1.49	1.62	1.67	

145

PACK NO. 231
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE 0 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.50	CELL VOLTAGES 1	2	3	4	5	
3640.	5.88	1.50	1.19	1.19	1.20	1.19	1.16	
3670.	5.85	1.48	1.18	1.18	1.19	1.18	1.16	END OF DISCHARGE
3747.	5.84	1.47	1.18	1.18	1.19	1.18	1.15	
3777.	5.82	1.48	1.18	1.17	1.18	1.18	1.14	
3846.	5.80	1.50	1.17	1.17	1.18	1.18	1.15	
3878.	5.83	1.50	1.18	1.17	1.18	1.18	1.14	
4046.	5.88	1.49	1.19	1.18	1.19	1.19	1.14	
		.86						
3640.	7.66	.49	1.53	1.54	1.55	1.53	1.55	END OF CHARGE
3670.	7.65	.47	1.53	1.53	1.56	1.54	1.54	
3747.	7.68	.47	1.54	1.54	1.56	1.54	1.54	
3777.	7.68	.46	1.54	1.54	1.56	1.54	1.55	
3846.	7.66	.47	1.54	1.53	1.56	1.54	1.54	
3878.	7.66	.50	1.53	1.54	1.56	1.54	1.52	
4046.	7.63	.52	1.53	1.53	1.56	1.53	1.52	

9/1

PACK NO. 203
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 125

TEST TEMPERATURE 25 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	
3798.	5.72	1.51	1.16	1.16	1.13	1.16	1.16	DISCHARGE END OF
3828.	5.72	1.50	1.16	1.15	1.13	1.16	1.16	
3905.	5.70	1.51	1.15	1.15	1.12	1.16	1.16	
3935.	5.52	1.51	1.11	1.11	1.08	1.13	1.13	
4004.	5.74	1.50	1.16	1.16	1.13	1.16	1.17	
4036.	5.73	1.51	1.16	1.15	1.13	1.16	1.15	
4069.	5.76	1.50	1.17	1.16	1.13	1.16	1.16	
4118.	5.81	1.50	1.17	1.16	1.16	1.17	1.17	
4151.	5.73	1.51	1.15	1.15	1.14	1.16	1.15	
4214.	5.78	1.50	1.17	1.17	1.14	1.17	1.16	
		.94						
3798.	7.25	.95	1.45	1.46	1.47	1.47	1.46	END OF CHARGE
3828.	7.22	.70	1.45	1.45	1.46	1.46	1.45	
3905.	7.21	.95	1.44	1.45	1.45	1.46	1.45	
3935.	7.26	.96	1.45	1.46	1.47	1.47	1.45	
4004.	7.28	.95	1.46	1.46	1.47	1.47	1.47	
4036.	7.25	.95	1.45	1.46	1.46	1.47	1.45	
4069.	7.30	.94	1.46	1.47	1.46	1.48	1.46	
4118.	7.24	.95	1.45	1.45	1.46	1.47	1.45	
4151.	7.21	.95	1.44	1.45	1.46	1.46	1.43	
4214.	7.27	.95	1.45	1.46	1.47	1.47	1.45	

PACK NO. 202 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C
SONOTONE 3 A.H. PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.40	CELL VOLTAGES 1	2	3	4	5	
3479.	4.14	2.37	.99	1.12	.00	1.02	1.04	END OF DISCHARGE
3508.	4.16	2.38	.99	1.12	.00	1.03	1.05	
3586.	4.25	2.34	1.02	1.14	.00	1.06	1.07	
3615.	4.22	2.33	1.01	1.13	.00	1.05	1.06	
3684.	4.13	2.39	.98	1.12	.00	1.02	1.05	
3716.	4.06	2.43	.97	1.11	.00	.99	1.01	
3750.	4.19	2.36	1.01	1.12	.00	1.03	1.05	
3798.	4.43	2.39	1.10	1.13	.00	1.11	1.11	
3832.	4.39	2.39	1.08	1.12	.00	1.10	1.11	
3894.	4.44	2.33	1.08	1.13	.00	1.13	1.12	
		1.50						
3479.	5.96	1.06	1.48	1.47	.00	1.57	1.48	END OF CHARGE
3508.	5.96	1.06	1.48	1.47	.00	1.56	1.48	
3586.	5.94	1.33	1.47	1.47	.00	1.55	1.48	
3615.	5.96	1.31	1.48	1.47	.00	1.56	1.48	
3684.	5.97	1.14	1.48	1.47	.00	1.57	1.49	
3716.	5.97	1.13	1.48	1.47	.00	1.57	1.48	
3750.	5.98	1.10	1.48	1.47	.00	1.57	1.49	
3798.	6.00	1.12	1.47	1.46	.00	1.57	1.53	
3832.	5.99	1.18	1.47	1.47	.00	1.57	1.51	
3894.	6.01	1.09	1.47	1.47	.00	1.59	1.50	

PACK NO. 226
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 15
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 0.90	CELL VOLTAGES 1	2	3	4	5	
3627.	5.77	.90	1.18	1.17	1.16	1.17	1.14	END OF DISCHARGE
3685.	5.82	.90	1.19	1.17	1.17	1.17	1.16	
3714.	5.83	.90	1.19	1.18	1.18	1.18	1.16	
3783.	5.81	.90	1.18	1.17	1.17	1.18	1.16	
3815.	5.80	.91	1.18	1.17	1.17	1.17	1.14	
3849.	5.80	.90	1.18	1.18	1.16	1.18	1.14	
3897.	5.84	.90	1.21	1.17	1.17	1.18	1.14	
3931.	5.83	.90	1.19	1.17	1.17	1.18	1.14	
3993.	5.86	.88	1.18	1.19	1.19	1.19	1.15	
		.72						
3627.	7.08	.73	1.40	1.42	1.44	1.43	1.44	END OF CHARGE
3685.	7.06	.73	1.40	1.42	1.43	1.42	1.44	
3714.	7.09	.73	1.41	1.42	1.43	1.42	1.44	
3783.	7.08	.72	1.40	1.42	1.43	1.43	1.44	
3815.	7.08	.73	1.40	1.42	1.44	1.42	1.43	
3849.	7.07	.72	1.40	1.42	1.43	1.42	1.43	
3897.	7.08	.73	1.41	1.41	1.43	1.42	1.43	
3931.	7.08	.73	1.40	1.42	1.44	1.42	1.43	
3993.	7.11	.73	1.41	1.43	1.45	1.43	1.44	

6/1

PACK NO. 237
SONOTONE 3 A.H.

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	
3596.	4.96	1.49	1.07	1.08	1.03	1.08	.74	
3626.	5.02	1.49	1.10	1.09	1.02	1.10	.74	END OF DISCHARGE
3637.	4.19	1.34	1.01	1.02	.77	1.02	.30	
3665.	[illegible]	1.47	1.13	1.13	1.05	1.13	.83	
3733.	6.16	1.51	1.12	1.12	.97	1.12	.88	
3802.	[illegible]	1.50	1.11	1.11	.92	1.11	.81	
3834.	[illegible]	1.51	1.16	1.16	1.15	1.16	1.04	
3867.	7.61	1.52	1.16	1.16	1.15	1.16	1.01	
[illegible]	[illegible]	1.51	1.17	1.17	1.16	1.17	1.03	
[illegible]	7.51	1.51	1.16	1.16	1.17	.16	.97	
		1.20						
3596.	7.18	.55	1.42	1.43	1.43	1.43	1.50	
3626.	7.22	.40	1.43	1.44	1.43	1.44	1.51	END OF CHARGE
3637.	7.28	.71	1.44	1.45	1.44	1.45	1.54	
3665.	7.27	.52	1.44	1.46	1.44	1.45	1.54	
3733.	7.23	.56	1.43	1.45	1.43	1.44	1.52	
3802.	7.32	.66	1.44	1.46	1.45	1.46	1.56	
3834.	7.31	.75	1.44	1.45	1.45	1.45	1.54	
3867.	7.29	.73	1.44	1.45	1.45	1.45	1.53	
3916.	7.30	.82	1.44	1.45	1.45	1.46	1.54	
[illegible]	7.27	.55	1.43	1.45	1.45	1.45	1.52	

150

PACK NO. 257
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 0
ORBIT PERIOD 24 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGES 1	2	3	4	5	
164.	4.21	1.00	.00	1.02	1.08	1.07	1.07	
178.	3.78	.97	.00	.59	1.08	1.07	1.06	END OF DISCHARGE
190.	2.43	.87	.00	.76	1.08	1.07	1.05	
		.30						
164.	6.01	.00	.00	1.44	1.51	1.65	1.46	
178.	5.99	.01	.00	1.44	1.48	1.66	1.44	END OF CHARGE
190.	6.01	.00	.00	1.45	1.49	1.68	1.42	

151

PACK NO. 69
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 25 C
ORBIT PERIOD 24 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGES 1	2	3	4	5	
121.	5.35	1.00	1.08	1.08	1.08	1.08	1.07	
135.	5.34	.99	1.07	1.07	1.08	1.08	1.05	END OF DISCHARGE
147.	5.36	.99	1.07	1.08	1.09	1.08	1.06	
		.30						
121.	7.49	.03	1.48	1.48	1.51	1.49	1.57	
135.	7.57	.00	1.44	1.44	1.76	1.49	1.48	END OF CHARGE
147.	7.57	.00	1.44	1.44	1.79	1.45	1.47	

251

PACK NO. 233
YARDNEY 5 A.H.

DEPTH OF DISCHARGE 20
PERCENT OF RECHARGE .3A

TEST TEMPERATURE 25 C
ORBIT PERIOD 24 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 1.00	CELL VOLTAGES 1	2	3	4	5	
121.	5.36	.99	1.08	1.08	1.08	1.08	1.08	END OF DISCHARGE
135.	5.36	1.01	1.08	1.08	1.08	1.08	1.07	
147.	5.60	1.00	1.11	1.09	1.14	1.16	1.13	
		.30						
121.	7.44	.06	1.49	1.50	1.50	1.50	1.50	END OF CHARGE
135.	7.42	.02	1.49	1.49	1.50	1.49	1.48	
147.	7.60	.00	1.53	1.53	1.53	1.53	1.52	

153

PACK NO. 232 DEPTH OF DISCHARGE 25 TEST TEMPERATURE -20 C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
883.	5.68	2.76	1.14	1.15	1.15	1.14	1.14	END OF DISCHARGE
919.	5.68	2.73	1.14	1.15	1.15	1.14	1.15	
998.	5.65	2.78	1.13	1.14	1.14	1.13	1.14	
1027.	5.71	2.72	1.14	1.16	1.16	1.15	1.15	
1096.	5.60	2.81	1.12	1.13	1.14	1.13	1.12	
1128.	5.64	2.82	1.13	1.14	1.14	1.14	1.12	
1169.	5.78	2.80	1.16	1.16	1.16	1.16	1.16	
1210.	5.40	2.79	1.09	1.10	1.10	1.10	1.01	
1249.	5.77	2.76	1.16	1.16	1.16	1.16	1.15	
1304.	5.75	2.74	1.16	1.16	1.16	1.16	1.14	
		1.61						
883.	7.55	.88	1.51	1.53	1.53	1.52	1.52	END OF CHARGE
919.	7.54	.84	1.51	1.52	1.52	1.52	1.52	
998.	7.57	.87	1.51	1.53	1.52	1.52	1.53	
1027.	7.59	.86	1.52	1.53	1.53	1.53	1.52	
1096.	7.54	.90	1.51	1.52	1.52	1.52	1.52	
1128.	7.56	.90	1.51	1.52	1.53	1.52	1.51	
1169.	6.55	1.62	1.32	1.31	1.32	1.32	1.31	
1210.	7.54	1.01	1.52	1.51	1.52	1.52	1.47	
1249.	7.54	.90	1.52	1.52	1.52	1.52	1.50	
1304.	7.54	.86	1.52	1.52	1.52	1.52	1.50	

154

PACK NO. 244
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 115

TEST TEMPERATURE -20 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
883.	5.75	2.76	1.16	1.16	1.16	1.16	1.16	
919.	5.75	2.75	1.15	1.16	1.16	1.16	1.16	END OF DISCHARGE
998.	5.73	2.77	1.15	1.16	1.15	1.15	1.16	
1027.	5.76	2.74	1.16	1.16	1.16	1.16	1.16	
1096.	5.72	2.76	1.15	1.15	1.15	1.15	1.16	
1128.	5.73	2.76	1.15	1.15	1.16	1.15	1.14	
1169.	5.73	2.76	1.15	1.15	1.15	1.15	1.15	
1210.	5.57	2.77	1.12	1.12	1.13	1.11	1.12	
1249.	5.80	2.76	1.17	1.17	1.17	1.17	1.16	
1304.	5.80	2.76	1.17	1.17	1.17	1.17	1.16	
		1.61						
883.	7.72	.79	1.55	1.55	1.56	1.55	1.56	
919.	7.69	.80	1.55	1.54	1.56	1.54	1.55	END OF CHARGE
998.	7.71	.78	1.55	1.55	1.55	1.54	1.56	
1027.	7.72	.75	1.55	1.55	1.56	1.55	1.55	
1096.	7.68	.74	1.54	1.54	1.55	1.54	1.55	
1128.	7.68	.76	1.54	1.54	1.55	1.54	1.54	
1169.	7.67	.75	1.54	1.54	1.55	1.54	1.53	
1210.	7.66	.90	1.53	1.55	1.55	1.53	1.53	
1249.	7.68	.86	1.54	1.54	1.55	1.54	1.54	
1304.	7.68	.79	1.54	1.54	1.55	1.54	1.54	

155

PACK NO. 200 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 5.6 A.H. FRS PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1170.	5.84	2.77	1.18	1.17	1.16	1.16	1.16	END OF DISCHARGE
1200.	5.81	2.80	1.17	1.17	1.17	1.16	1.17	
1277.	5.84	2.71	1.18	1.17	1.17	1.17	1.18	
1307.	5.83	2.72	1.18	1.18	1.17	1.17	1.17	
1376.	6.78	.00	1.36	1.36	1.36	1.36	1.37	
1408.	5.80	2.78	1.17	1.16	1.15	1.15	1.16	
1527.	6.00	2.78	1.20	1.20	1.19	1.19	1.20	
1576.	5.94	2.75	1.20	1.19	1.18	1.18	1.19	
		1.61						
1170.	7.72	1.14	1.54	1.54	1.53	1.55	1.53	END OF CHARGE
1200.	7.72	1.23	1.54	1.55	1.55	1.55	1.55	
1277.	7.72	1.14	1.54	1.55	1.54	1.55	1.54	
1307.	7.71	1.12	1.54	1.55	1.54	1.55	1.55	
1376.	7.69	1.28	1.54	1.54	1.54	1.55	1.55	
1408.	7.71	1.17	1.55	1.55	1.53	1.55	1.54	
1527.	7.68	1.14	1.54	1.54	1.52	1.53	1.53	
1576.	7.69	1.07	1.54	1.55	1.52	1.54	1.54	

PACK NO. 390 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 0 C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 115 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1187.	5.83	2.80	1.18	1.16	1.16	1.17	1.16	END OF
1294.	5.81	2.80	1.17	1.16	1.16	1.16	1.16	DISCHARGE
1323.	5.82	2.78	1.18	1.16	1.16	1.16	1.16	
1392.	5.79	2.81	1.17	1.16	1.15	1.16	1.15	
1424.	5.79	2.80	1.17	1.15	1.15	1.16	1.15	
1458.	5.80	2.80	1.17	1.16	1.15	1.16	1.16	
1506.	5.85	2.84	1.18	1.16	1.16	1.17	1.16	
1540.	5.83	2.84	1.18	1.16	1.16	1.17	1.16	
1602.	5.86	2.83	1.19	1.17	1.17	1.17	1.17	
		1.61						
1187.	7.79	.99	1.56	1.55	1.55	1.54	1.56	END OF
1294.	7.75	.88	1.55	1.54	1.54	1.53	1.55	CHARGE
1323.	7.76	.90	1.55	1.55	1.54	1.53	1.56	
1392.	7.74	.89	1.55	1.54	1.54	1.53	1.55	
1424.	7.73	.88	1.55	1.54	1.54	1.53	1.56	
1458.	7.75	.85	1.55	1.54	1.54	1.53	1.56	
1506.	7.78	.85	1.55	1.55	1.54	1.53	1.57	
1540.	7.72	.80	1.55	1.54	1.53	1.53	1.55	
1602.	7.76	.80	1.54	1.53	1.53	1.52	1.54	

PACK NO. 276 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 5.6 A.H. FRS PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1300.	5.38	2.75	1.06	1.06	1.10	1.09	1.10	END OF DISCHARGE
1407.	5.11	2.85	1.01	1.01	1.05	1.04	1.04	
1436.	5.26	2.78	1.04	1.05	1.08	1.07	1.06	
1487.	5.45	2.79	1.07	1.07	1.09	1.09	1.10	
1505.	5.46	2.76	1.09	1.08	1.10	1.12	1.12	
1537.	5.23	2.76	1.03	1.02	1.06	1.07	1.08	
1571.	5.41	2.76	1.07	1.06	1.07	1.11	1.13	
1653.	5.39	2.79	1.07	1.06	1.12	1.09	1.08	
		1.75						
1300.	7.31	1.76	1.46	1.48	1.48	1.46	1.47	END OF CHARGE
1407.	7.28	1.80	1.46	1.48	1.46	1.46	1.47	
1436.	7.29	1.79	1.46	1.48	1.47	1.46	1.47	
1487.	7.33	1.78	1.45	1.47	1.46	1.45	1.47	
1505.	7.30	1.77	1.46	1.47	1.47	1.46	1.47	
1537.	7.29	1.78	1.46	1.47	1.47	1.46	1.45	
1571.	7.31	1.77	1.46	1.48	1.47	1.47	1.46	
1653.	7.29	1.78	1.46	1.48	1.47	1.46	1.45	

PACK NO. 396 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25 C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 125 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1297.	5.54	2.62	1.10	1.14	1.12	1.11	1.10	END OF DISCHARGE
1332.	5.41	2.61	1.06	1.12	1.10	1.09	1.08	
1371.	5.50	2.73	1.08	1.14	1.12	1.11	1.10	
1439.	5.33	2.67	1.04	1.10	1.09	1.06	1.05	
1508.	5.52	2.58	1.08	1.14	1.13	1.11	1.10	
1540.	5.57	2.60	1.12	1.14	1.12	1.12	1.10	
1573.	5.51	2.62	1.12	1.12	1.11	1.10	1.08	
1622.	5.45	2.72	1.13	1.10	1.10	1.07	1.06	
1656.	5.41	2.63	1.12	1.09	1.09	1.07	1.05	
1718.	5.49	2.67	1.12	1.12	1.11	1.09	1.06	
		1.75						
1297.	7.19	1.21	1.45	1.43	1.45	1.44	1.45	END OF CHARGE
1332.	7.24	1.41	1.46	1.44	1.45	1.45	1.46	
1371.	7.18	1.27	1.45	1.44	1.44	1.44	1.45	
1439.	7.20	1.28	1.45	1.43	1.43	1.44	1.44	
1508.	7.19	1.17	1.45	1.43	1.44	1.45	1.45	
1540.	7.19	1.22	1.46	1.43	1.45	1.45	1.44	
1573.	7.19	1.26	1.46	1.43	1.44	1.44	1.44	
1622.	7.20	1.29	1.46	1.43	1.44	1.44	1.45	
1656.	7.18	1.16	1.46	1.43	1.44	1.44	1.44	
1718.	7.18	1.17	1.46	1.43	1.44	1.45	1.44	

PACK NO. 230 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 40 C
GULTON 5.6 A.H. RS PERCENT OF RECHARGE 160 ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1275	3.17	2.76	1.04	1.10	.00	1.14	.00	END OF DISCHARGE
		1.30						
1275	4.34	1.30	1.46	1.44	.00	1.43	.00	END OF CHARGE

091

PACK NO. 242
GULTON 5.6 A.H. FRS

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 160

TEST TEMPERATURE 40 C
ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGES	CURRENT 2.80	CELL VOLTAGES 1	2	3	4	5	
1407.	5.09	2.74	1.03	1.00	1.06	1.00	1.04	
1437.	5.15	2.75	1.04	1.03	1.05	1.02	1.05	END OF DISCHARGE
1514.	5.20	2.78	1.04	1.04	1.05	1.03	1.07	
1544.	5.09	2.76	1.01	1.01	1.05	1.01	1.05	
1631.	5.05	2.75	1.03	1.01	1.02	1.00	1.04	
1645.	5.12	2.77	1.05	1.02	1.03	1.01	1.03	
1679.	5.08	2.76	1.05	1.00	1.04	.99	1.03	
1712.	5.16	2.76	1.07	1.02	1.06	1.01	1.04	
1775.	5.19	2.75	1.06	1.00	1.09	1.02	1.05	
		2.24						
1407.	7.24	2.23	1.46	1.46	1.45	1.47	1.45	
1437.	7.24	2.28	1.46	1.45	1.45	1.46	1.45	END OF CHARGE
1514.	7.25	2.23	1.46	1.46	1.45	1.46	1.45	
1544.	7.21	1.92	1.45	1.45	1.45	1.46	1.44	
1631.	7.22	1.80	1.46	1.45	1.45	1.46	1.45	
1645.	7.23	1.86	1.46	1.45	1.46	1.46	1.43	
1679.	7.21	1.85	1.46	1.45	1.45	1.46	1.44	
1712.	7.21	1.82	1.46	1.45	1.45	1.45	1.43	
1775.	7.21	1.74	1.45	1.45	1.45	1.46	1.43	

191

PACK NO. 239 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C
'GUE COUL 3.6 A.H. PERCENT OF RECHARGE ORBIT PERIOD 90 MIN.

CYCLE NO.	PACK VOLTAGE	CURRENT 2.88	CELL VOLTAGES 1	2	3	4	5	1	2	3	4	5	
1714.	9.64	2.82	.92	.90	.93	1.07	.94	1.07	.98	.95	.94	.95	END OF
1744.	10.70	2.85	1.08	1.03	1.09	1.09	1.08	1.09	1.05	1.04	1.06	1.08	DISCHARGE
1821.	10.35	2.90	1.03	1.00	1.01	1.08	1.02	1.08	1.03	1.03	1.01	1.02	
1851.	10.22	2.85	1.03	.96	1.00	1.07	.99	1.07	1.06	1.01	.99	1.04	
1873.	11.01	2.87	1.11	1.16	1.11	1.06	1.13	1.06	1.07	1.12	1.11	1.03	
		3.60											
1714.	14.29	.27	1.42	1.43	1.43	1.47	1.43	1.45	1.42	1.41	1.41	1.41	END OF
1744.	14.30	.24	1.42	1.42	1.43	1.47	1.43	1.45	1.42	1.41	1.41	1.41	CHARGE
1821.	14.26	.41	1.41	1.43	1.41	1.46	1.43	1.44	1.41	1.40	1.41	1.40	
1851.	14.92	2.10	1.48	1.49	1.48	1.55	1.46	1.53	1.50	1.47	1.47	1.47	
1873.	14.22	.47	1.41	1.43	1.42	1.44	1.40	1.44	1.41	1.40	1.40	1.40	

29/

COULOMETER SONOTONE 5 A.H.

DEPTH OF DISCHARGE 30

ORBIT PERIOD 90 MINUTES
TEST TEMPERATURE 25° C

CYCLE NO.	PACK VOLTAGE	CURRENT	CIM	CELL VOLTAGES 1	2	3	4	5	
7540	5.41	3.00	-0.161	1.11	1.09	1.12	1.11	1.09	
7580	5.34		-0.172	1.12	1.09	1.12	1.12	1.10	
7620	5.37		-0.162	1.12	1.09	1.13	1.13	1.10	END OF DISCHARGE
7660	5.32		-0.149	1.10	1.09	1.12	1.12	1.09	
7700	5.25		-0.197	1.06	1.06	1.10	1.10	1.06	
7740	5.43		-0.153	1.12	1.10	1.14	1.13	1.11	
7780	5.37		-0.179	1.11	1.08	1.12	1.12	1.09	
7820	5.37		-0.161	1.12	1.09	1.13	1.13	1.10	
7860	5.42		-0.165	1.13	1.10	1.13	1.13	1.11	
7900	5.37		-0.150	1.11	1.09	1.13	1.13	1.09	
7960	5.49		-0.135	1.12	1.10	1.13	1.13	1.11	
8000	5.44		-0.131	1.12	1.10	1.13	1.13	1.10	TIME TO START OF TRICKLE CHARGE
8020	5.38		-0.174	1.11	1.09	1.12	1.12	1.09	

7540	8.00	0.30	+0.886	1.43	1.43	1.42	1.42	1.43	28:39	
7580			+0.887	1.43	1.43	1.42	1.42	1.42	28:48	
7620			+0.884	1.43	1.43	1.42	1.42	1.43	28:47	
7660			+0.895	1.42	1.42	1.42	1.42	1.42	29:00	
7700			+0.879	1.42	1.42	1.42	1.41	1.42	28:45	
7740			+0.884	1.42	1.43	1.42	1.42	1.42	29:50	END OF CHARGE
7780			+0.882	1.42	1.43	1.42	1.42	1.43	28:47	
7820			+0.875	1.42	1.42	1.42	1.42	1.44	28:35	
7860			+0.870	1.43	1.43	1.42	1.42	1.43	28:45	
7900			+0.889	1.42	1.43	1.42	1.42	1.42	28:43	
7960			+0.890	1.42	1.43	1.42	1.42	1.42	28:42	
8000			+0.885	1.42	1.43	1.42	1.42	1.42	28:51	
8020			+0.876	1.43	1.43	1.42	1.42	1.42	28:43	

SHERFEY
GULTON 3.6 A.H.

DEPTH OF DISCHARGE 40
PERCENT OF RECHARGE 60

TEST TEMPERATURE 25° C
ORBIT PERIOD 90 MINUTES

CYCLE NO.	PACK VOLTAGE	CURRENT	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
2821	9.74	2.88	1.13		0.85	1.17	1.17	1.17	1.16	1.07	1.16	0.89	
2860	10.54		1.17		1.03	1.23	1.22	1.22	1.22	1.19	1.22	1.04	
2901	10.38		1.16		0.99	1.21	1.20	1.20	1.20	1.14	1.20	0.98	END OF DISCHARGE
2941	9.79		1.13		0.87	1.17	1.17	1.17	1.17	1.07	1.16	0.89	
2980	10.44		1.18		0.97	1.23	1.22	1.22	1.22	1.18	1.22	1.01	
3020	10.22		1.16		0.94	1.21	1.20	1.20	1.20	1.13	1.20	0.95	
3061	9.58		1.12		0.81	1.15	1.16	1.16	1.15	1.06	1.15	0.86	
3100	10.34		1.17		0.91	1.22	1.21	1.21	1.21	1.18	1.21	0.98	
3140	10.14		1.15		0.91	1.20	1.20	1.20	1.20	1.13	1.19	0.95	
3181	9.66		1.12		0.76	1.16	1.16	1.16	1.16	1.07	1.15	0.86	
3220	9.38		1.17			1.22	1.22	1.21	1.22	1.18	1.21	0.97	
3260	9.18		1.15			1.20	1.20	1.19	1.20	1.13	1.20	0.94	
3301	8.82		1.12			1.17	1.17	1.16	1.16	1.06	1.15	0.85	
2821	13.35	2.16	1.49		1.54	1.44	1.45	1.45	1.45	1.49	1.46	1.58	
2860	14.25		1.63		1.57	1.55	1.58	1.56	1.55	1.58	1.61	1.62	
2901	13.57		1.51		1.57	1.46	1.47	1.47	1.47	1.51	1.48	1.62	END OF CHARGE
2941	13.40		1.49		1.55	1.45	1.45	1.45	1.45	1.49	1.45	1.60	
2980	13.95		1.60		1.57	1.50	1.53	1.50	1.51	1.54	1.57	1.62	
3020	13.52		1.50		1.59	1.46	1.46	1.46	1.46	1.46	1.47	1.62	
3061	13.38		1.49		1.56	1.45	1.45	1.45	1.45	1.49	1.46	1.59	
3100	14.40		1.65		1.56	1.58	1.60	1.57	1.59	1.59	1.64	1.61	
3140	13.50		1.50		1.58	1.46	1.46	1.46	1.46	1.49	1.46	1.61	
3181	13.37		1.49		1.56	1.45	1.45	1.45	1.45	1.49	1.45	1.59	
3220	12.62		1.62			1.55	1.57	1.54	1.55	1.56	1.62	1.60	
3260	11.94		1.49			1.46	1.46	1.46	1.46	1.49	1.46	1.61	
3301	11.88		1.49			1.45	1.45	1.46	1.45	1.50	1.46	1.60	

691

PACK NO. 185 DEPTH OF DISCHARGE 25 TEST TEMPERATURE -20
YARDNEY 12 AH AGZN PERCENT OF RECHARGE 130 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
214.	6.50	4.25	1.30	1.31	1.31	1.31	1.30	END OF DISCHARGE
		.82						
214.	8.08	.82	1.62	1.62	1.64	1.62	1.62	END OF CHARGE

165

PACK NO. 197
YARDNEY 12 AH AGZN

DEPTH OF DISCHARGE 25
PERCENT OF RECHARGE 130

TEST TEMPERATURE 0
ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
106.	6.65	4.10	1.33	1.34	1.34	1.34	1.33	END OF DISCHARGE
106.	7.94	1.15 1.15	1.61	1.58	1.59	1.60	1.59	END OF CHARGE

991

PACK NO. 182 DEPTH OF DISCHARGE 25 TEST TEMPERATURE 25
YARDNEY 12 AH AGZN PERCENT OF RECHARGE 130 ORBIT PERIOD 1.5 HRS.

CYCLE NO.	PACK VOLTAGE	CURRENT 6.00	CELL VOLTAGES 1	2	3	4	5	
692.	5.33	5.88	1.07	1.07	1.06	1.07	1.07	END OF DISCHARGE
761.	5.34	5.92	1.07	1.07	1.07	1.07	1.07	
829.	5.35	5.95	1.07	1.08	1.07	1.07	1.07	
898.	5.30	5.99	1.06	1.06	1.06	1.06	1.06	
930.	5.31	6.06	1.06	1.06	1.06	1.06	1.06	
963.	5.32	6.08	1.06	1.06	1.06	1.06	1.06	
1012.	5.34	6.10	1.07	1.07	1.06	1.07	1.07	
1046.	5.35	5.98	1.07	1.07	1.07	1.07	1.07	
1108.	5.36	5.94	1.08	1.07	1.07	1.08	1.07	
		3.90						
692.	7.70	1.49	1.55	1.53	1.53	.00	1.54	END OF CHARGE
761.	7.70	1.63	1.54	1.53	1.53	1.54	1.53	
829.	7.66	1.64	1.54	1.54	1.54	1.54	1.54	
898.	7.64	1.72	1.53	1.52	1.53	1.53	1.52	
930.	7.64	1.76	1.53	1.52	1.53	1.53	1.53	
963.	7.65	1.73	1.53	1.52	1.52	1.53	1.52	
1012.	7.80	1.42	1.57	1.55	1.55	1.55	1.56	
1046.	7.79	1.37	1.57	1.55	1.55	1.56	1.56	
1108.	7.79	1.40	1.57	1.55	1.55	1.56	1.56	

PACK NO. 609 DEPTH OF DISCHARGE 40 TEST TEMPERATURE 25 C
DELCO 25 A.H. AG ZN PERCENT OF RECHARGE ORBIT PERIOD 24 HRS.

CYCLE NO.	PACK VOLTAGES	CURRENT 10.00	CELL VOLTAGES 1	2	3	4	5	6	7	8	9	10	
79.	14.39	10.03	1.45	1.44	1.44	1.44	1.44	1.43	1.43	1.43	1.42	1.43	END OF
104.	14.40	10.06	1.44	1.44	1.45	1.44	1.44	1.43	1.44	1.43	1.43	1.43	DISCHARGE
		1.00											
79.	18.78	.00	1.88	1.88	1.88	1.88	1.88	1.87	1.87	1.86	1.87	1.86	END OF
104.	18.77	.02	1.84	1.89	1.89	1.89	1.88	1.88	1.88	1.87	1.84	1.84	CHARGE